



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182  
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**SUBJECT: NOTICE OF INTENT TO ISSUE A DRAFT NEGATIVE  
DECLARATION**

**PROJECT TITLE: ULTRAMAR INC., VALERO WILMINGTON REFINERY  
RULE 1105.1 COMPLIANCE PROJECT**

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD) is the Lead Agency and has prepared a Negative Declaration for the project identified above pursuant to CEQA Guidelines §15189 – Compliance with Performance Standard of Treatment Requirement Rule or Regulation. The purpose of this Notice of Intent (NOI) is to solicit comments on the environmental analysis contained in the Draft Negative Declaration.

This letter, the attached NOI, and the Draft Negative Declaration do not require any action or response from you. The purpose of these documents is simply to provide information to you on the above project. If the proposed project has no bearing on you or your organization, no action on your part is necessary.

The Draft Negative Declaration can be obtained from SCAQMD Headquarters, by calling the SCAQMD's Public Information Center at (909) 396-2039, or by accessing the SCAQMD website at <http://www.aqmd.gov/ceqa/nonaqmd.html>.

Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis should be addressed to Mr. James Koizumi at the address shown above, sent by FAX to (909) 396-3324 or e-mailed to [http://www.jkoizumi@aqmd.gov](mailto:http://www.jkoizumi@aqmd.gov). Comments must be received no later than 5:00 p.m. on March 7, 2007. Please include the name and phone number of the contact person for your organization.

**Project Applicant:** Ultramar Inc., Valero Wilmington Refinery

**Date:** February 6, 2007

**Signature:** \_\_\_\_\_

*Steve Smith*

Steve Smith, Ph.D.  
Program Supervisor  
Planning, Rules, and Area Sources  
(909) 396-3054

**Reference:** California Code of Regulations, Title 14, §§15072, 15073, 15105, and 15371

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**21865 Copley Drive, Diamond Bar, California 91765-4182**

**NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION**

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**Project Title:**

Ultramar Inc., Valero Wilmington Refinery Rule 1105.1 Compliance Project

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**Project Location:**

The Ultramar Inc., Valero Wilmington Refinery is located at 2402 East Anaheim Street, Wilmington (Los Angeles), California.

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**Description of Nature, Purpose, and Beneficiaries of Project:**

The Ultramar Inc., Valero Wilmington Refinery is proposing to install one new electrostatic precipitator (ESP) and continue operating the two existing ESPs to comply with the South Coast Air Quality Management District Rule 1105.1 – Reduction of PM10 and Ammonia Emissions from Fluid Catalytic Cracking Units.

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**Lead Agency:**

South Coast Air Quality Management District

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**Division:**

Planning, Rule Development and Area Sources

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**Draft ND and all Supporting Documentation are Available at:**

SCAQMD Headquarters  
21865 Copley Drive  
Diamond Bar, CA 91765

Or by Calling:  
(909) 396-2039

The Draft Negative Declaration is also available by Accessing:  
<http://www.aqmd.gov/ceqa/nonaqmd.html>

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The proposed project will not have a statewide, regional and area-wide significance, therefore, a CEQA scoping meeting is not required (pursuant to Public Resources Code §21083.9(a)(2)) and, thus, was not held for the proposed project.

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**The Public Notice of Intent is provided through the following:**

☒ Los Angeles Times (February 6, 2007)      ☒ AQMD Website      ☒ AQMD Mailing List

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**Draft ND Review Period:**

February 6, 2007 through March 7, 2007

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**CEQA Contact Person:**

James Koizumi

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[jkoizumi@aqmd.gov](mailto:jkoizumi@aqmd.gov)

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## **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

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**Draft Negative Declaration**  
**Ultramar Inc., Valero Wilmington Refinery**  
**Rule 1105.1 Compliance Project**  
**SCH No. TBD**

**February 6, 2007**

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Submitted to:  
**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

Prepared by:  
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## TABLE OF CONTENTS

Page No.

### CHAPTER 1 – PROJECT DESCRIPTION

1.0 Introduction .....	1-1
1.1 Agency Authority .....	1-2
1.2 Project Objective .....	1-2
1.3 Background CEQA Documents .....	1-2
1.4 Background Information .....	1-4
1.5 Basis for Decision to Prepare a Negative Declaration .....	1-4
1.6 Proposed Location .....	1-6
1.7 Land Use and Zoning .....	1-8
1.8 Existing Refinery Operation.....	1-8
1.9 Proposed Project Modifications to the Refinery .....	1-9
1.9.1 Summary of Project Evaluated in 2003 Final EA.....	1-9
1.9.2 Ultramar Rule 1105.1 Compliance Project.....	1-12

### CHAPTER 2 – ENVIRONMENTAL CHECKLIST

Introduction .....	2-1
General Information.....	2-1
Environmental Factors Potentially Affected.....	2-2
Determination .....	2-3
Environmental Checklist and Discussion .....	2-4
Aesthetics .....	2-4
Agriculture Resources.....	2-6
Air Quality .....	2-7
Biological Resources .....	2-15
Cultural Resources .....	2-17
Energy .....	2-19
Geology and Soils .....	2-21
Hazards and Hazardous Materials .....	2-25
Hydrology and Water Quality.....	2-31
Land Use and Planning .....	2-36
Mineral Resources .....	2-38
Noise .....	2-39
Population and Housing.....	2-42
Public Services.....	2-44
Recreation .....	2-46
Solid/Hazardous Waste.....	2-48
Transportation/Traffic.....	2-49
Mandatory Findings of Significance.....	2-53
References .....	2-56

### CHAPTER 3 – ACRONYMS AND GLOSSARY

Acronyms .....	3-1
Glossary .....	3-5

## TABLE OF CONTENTS

---

Page No.

### FIGURES:

Figure 1-1	Regional Map.....	1-7
Figure 1-2	Site Plan .....	1-13

### TABLES:

Table 1-1	Assumptions Used in 2003 Final EA.....	1-11
Table 2-1	Air Quality Significance Thresholds .....	2-9
Table 2-2	Maximum Daily Construction Emissions from 2003 Final EA for Rule 1105.1 .....	2-11
Table 2-3	The Ultramar Refinery Peak Construction Emissions for Compliance with Rule 1105.1 .....	2-11
Table 2-4	Comparison of the Ultramar Refinery Peak Construction Emissions for Compliance with Rule 1105.1 vs. Maximum Daily Construction Emissions from the 2003 Final EA for Rule 1105.1.....	2-12
Table 2-5	Localized Significance Threshold Emissions Comparison.....	2-13

### APPENDIX:

Appendix A: Construction Emission Calculations



## **CHAPTER 1**

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### **PROJECT DESCRIPTION**

Introduction  
Agency Authority  
Project Objective  
Background CEQA Documents  
Background Information  
Basis for Decision to Prepare a Negative Declaration  
Project Location  
Land Use and Zoning  
Existing Refinery Configuration and Operation  
Proposed Project Modifications to the Refinery



**ULTRAMAR INC.**  
**VALERO WILMINGTON REFINERY**  
**RULE 1105.1 COMPLIANCE PROJECT**

**1.0 INTRODUCTION**

On November 7, 2003, the South Coast Air Quality Management District (SCAQMD) adopted Rule 1105.1 - Reduction of PM10 and Ammonia Emissions from Fluid Catalytic Cracking Units (FCCUs), and certified the Final Environmental Assessment for Proposed Rule 1105.1 (2003 Final EA, SCAQMD No. 012403BAR). The SCAQMD Rule 1105.1 establishes new emission limits for filterable particulate emissions of 10 microns or less (PM10) and ammonia effective December 31, 2008, for the refinery FCCUs. To comply with Rule 1105.1 by the final compliance date, the Ultramar Refinery operators propose to install one new electrostatic precipitator (ESP) downstream of its two existing ESPs to further control PM10 emissions and meet the SCAQMD's Rule 1105.1 emission limits.

The FCCU at the Ultramar Refinery plays a major role in Refinery operations by upgrading heavy gas oils to lighter, more valuable hydrocarbons. The FCCU processes a feed mixture of oils and produces motor gasoline blending products, heavy cat naphtha, and debutanized gasoline. In addition, a considerable amount of liquefied petroleum gas is produced as feed to the Alkylation Unit. Other products produced by the FCCU include slurry and light cycle oils, which are used for heavy fuel oil, distillate blending, and feeding other process units.

The fluid catalytic cracking process involves reaction, catalyst regeneration, and product separation. During catalyst regeneration, hot flue gas is generated and sent to pollution control equipment before discharging to atmosphere. The flue gas flows through two existing parallel ESPs to control particulate matter (PM) and discharges to the atmosphere via the FCCU stack. Ammonia can be injected upstream of the ESPs to condition the particulate and enhance PM removal efficiency.

This document, prepared pursuant to the California Environmental Quality Act (CEQA), Public Resources Code 21000 et seq., constitutes a Negative Declaration for the Ultramar Rule 1105.1 Compliance Project. Further, this Negative Declaration has been prepared pursuant to CEQA Guidelines §15189 – Compliance with Performance Standard or Treatment Requirement Rule or Regulation, which applies to projects intended solely to comply with a performance standard or treatment requirement which was the subject of a previous environmental analysis. When preparing a negative declaration on a compliance project the lead agency shall, to the greatest extent feasible, use the previous environmental analysis (CEQA Guidelines §15189(a)). In this case, the previous environmental analysis regarding the potential adverse impacts associated with complying with Rule 1105.1 refers to the analysis contained in the 2003 Final EA. Therefore, the SCAQMD is relying on the analysis in the 2003 Final EA in the preparation of this Negative Declaration for the Ultramar Rule 1105.1 Compliance Project.

### 1.1 AGENCY AUTHORITY

California Public Resources Code §21000 *et seq.*, requires that the environmental impacts of proposed “projects” be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts be identified and implemented. The Ultramar Refinery Rule 1105.1 Compliance Project constitutes a “project” as defined by CEQA. To fulfill the purpose and intent of CEQA, the SCAQMD is the “lead agency” for the Ultramar Refinery Rule 1105.1 Compliance Project and, as such, is the agency that prepared the 2003 Final EA, as well as this current Negative Declaration. In addition, as the public agency with primary approval authority over the proposed project, the SCAQMD now has prepared this Negative Declaration to address the potential environmental impacts associated with the Ultramar Refinery Rule 1105.1 Compliance Project, specifically, the installation of one new ESP (CEQA Guidelines §15189).

The lead agency is the public agency that has the principal responsibility for carrying out or approving a project that may have a significant adverse effect upon the environment (Public Resources Code §21067). Since the SCAQMD has the greatest responsibility for supervising or approving the Ultramar Refinery Rule 1105.1 Compliance Project as a whole, it was determined that the SCAQMD would be the most appropriate public agency to act as lead agency for the proposed project (CEQA Guidelines §15051(b)).

To fulfill the purpose and intent of CEQA, the SCAQMD is relying on the 2003 Final EA for Rule 1105.1 that was certified in November 2003 and has prepared this Negative Declaration to address other potential adverse environmental impacts associated with the construction and operation of one new ESP downstream of the two existing parallel ESPs at the Ultramar Refinery.

### 1.2 PROJECT OBJECTIVE

The purpose of the Ultramar Refinery Rule 1105.1 Compliance Project is to comply with emission limits in Rule 1105.1, which will reduce PM10 and ammonia emissions from the FCCU located at the Ultramar Refinery in Wilmington.

### 1.3 BACKGROUND CEQA DOCUMENTS

The impacts associated with implementing SCAQMD Rule 1105.1 were evaluated in the following CEQA documents. A chronological summary of the CEQA documents prepared for SCAQMD Rule 1105.1 is presented below.

Notice of Preparation/Initial Study of an Environmental Assessment for Proposed Rule 1105.1 - Reduction of PM10 and Ammonia Emissions from Fluid Catalytic Cracking Units, September 10, 2002 (SCAQMD No. 091002BAR).

A Notice of Preparation and Initial Study (NOP/IS) for Rule 1105.1 was released for a 30-day public review and comment period from September 13, 2002 to October 15, 2002. The NOP/IS included a project description, project location, an environmental checklist and a preliminary discussion of potential adverse environmental effects that may result from implementing Rule

1105.1. The NOP/IS identified the topics of “air quality” and “hazards and hazardous materials” as the only areas that may be adversely affected by implementing Rule 1105.1. One comment letter regarding the NOP/IS was received. The NOP/IS, including the comment letter and its responses, has been archived in Appendix C of the Final EA for Rule 1105.1 and can be obtained by contacting the SCAQMD's Public Information Center at (909) 396-2039 or by visiting the following website at:

[http://www.aqmd.gov/ceqa/documents/2003/aqmd/finalEA/FEA\\_1105.doc](http://www.aqmd.gov/ceqa/documents/2003/aqmd/finalEA/FEA_1105.doc).

Draft Environmental Assessment for Proposed Rule 1105.1 - Reduction of PM10 and Ammonia Emissions from Fluid Catalytic Cracking Units, January 24, 2003 (SCAQMD, No. 012403BAR).

The Draft EA for Rule 1105.1, which was a substitute document for an environmental impact report (EIR) prepared pursuant to CEQA Guidelines §15252, was released for a 45-day public review and comment period from January 28, 2003, through March 13, 2003. The Draft EA included a comprehensive project description, a description of the existing setting that could be adversely affect by the proposed project, analysis of the potential adverse environmental impacts (air quality and hazards/hazardous materials), cumulative impacts, mitigation measures, project alternatives and all other relevant topics required by CEQA (Relationship Between Short-Term and Long-Term Productivity, Significant Irreversible Environmental Changes and Potential Growth-Inducing Impacts). The Draft EA analyzed refinery-specific impacts as well as impacts from the rule as a whole. The Draft EA also included a copy of the NOP/IS, copies of comment letters received on the NOP/IS, and responses to all comment letters received on the NOP/IS. It was concluded in the Draft EA that implementation of Rule 1105.1 would result in potential significant adverse impacts to air quality during construction for the installation of new air pollution control devices. Hazards/hazardous materials impacts were concluded to be insignificant. The Draft EA can be obtained by contacting the SCAQMD's Public Information Center at (909) 396-2039.

Final Environmental Assessment for Proposed Rule 1105.1 - Reduction of PM10 and Ammonia Emissions from Fluid Catalytic Cracking Units, September 30, 2003 (SCAQMD, No. 012403BAR, certified November 7, 2003).

The Final Environmental Assessment for Proposed Rule 1105.1 (2003 Final EA) included applicable changes to the text of the previous Draft EA and the responses to comments received during the 45-day public review and comment period. The SCAQMD received three comment letters on the Draft EA during the public comment period. The comment letters and their responses were included in Appendix E of the 2003 Final EA. The SCAQMD concluded that implementation of Rule 1105.1 could result in significant adverse impacts to air quality during the construction phase to modify existing or install new air pollution control equipment. The Final EA analyzed refinery-specific impacts as well as impacts from the rule as a whole. Mitigation measures for construction emissions were incorporated into the 2003 Final EA and a Statement of Findings and a Statement of Overriding Considerations for the implementation of Rule 1105.1 were also adopted. The 2003 Final EA was certified by the SCAQMD Governing Board on November 7, 2003. The 2003 Final EA, which includes comment letters relative to the Draft EA and their responses (which are archived in Appendix E), the NOP/IS (which is archived in Appendix C), and comment letters

relative to the NOP/IS and their responses (which are archived in Appendix D) can be obtained by contacting the SCAQMD's Public Information Center at (909) 396-2039 or by visiting the following website at:

[http://www.aqmd.gov/ceqa/documents/2003/aqmd/finalEA/FEA\\_1105.doc](http://www.aqmd.gov/ceqa/documents/2003/aqmd/finalEA/FEA_1105.doc).

The SCAQMD is relying on these documents in the analysis for the proposed Ultramar Rule 1105.1 Compliance Project.

### **1.4 BACKGROUND INFORMATION**

Subsequent to the adoption of Rule 1105.1 and certification of the 2003 Final EA, the Western States Petroleum Association (WSPA) filed a lawsuit against the SCAQMD challenging the certification of the 2003 Final EA and approval of Rule 1105.1 (WSPA vs. SCAQMD et al, Superior Court of California, County of Los Angeles, Case No. BS087190). The lawsuit asserted, among other things, that emission reductions to be achieved from implementing Rule 1105.1 were over-estimated, implementation of Rule 1105.1 would not be cost effective, and that the CEQA document failed to consider all environmental impacts of available emissions control technologies to comply with the emission limits. The judge found that all the contentions made by WSPA were without merit. WSPA filed an appeal of this judgment (WSPA vs. SCAQMD et al, Court of Appeal of the State of California, Second Appellate District, Division Seven, Case No. B181303) and the court once again concluded that WSPA's arguments were without merit. Further, the court concluded that the SCAQMD met its obligation under CEQA to conduct an environmental assessment of Rule 1105.1. Therefore, in accordance with Public Resources Code (PRC) §21167.3(b), the 2003 Final EA has been determined to comply with CEQA.

### **1.5 BASIS FOR DECISION TO PREPARE A NEGATIVE DECLARATION**

The SCAQMD was the lead agency responsible for preparing the 2003 Final EA and is the public agency that has the primary responsibility for approving the currently proposed project. Therefore, the SCAQMD is the appropriate lead agency to evaluate the potential environmental effects of the currently proposed project which is the subject of this Negative Declaration. The SCAQMD has determined that a Negative Declaration is the appropriate document to evaluate the proposed modifications at the Ultramar Refinery to comply with the requirements of Rule 1105.1.

The SCAQMD has a certified regulatory program pursuant to PRC §21080.5 applicable to its regulatory program (promulgation of rules and regulations), but not to its stationary source permitting program. CEQA Guidelines §15187 requires agencies (including agencies whose regulatory programs have been certified by the Resources Agency pursuant to §21080.5 of the PRC) to perform an environmental analysis of the reasonably foreseeable methods by which compliance with a rule or regulation will be achieved at the time of the adoption of a rule, regulation, or requiring the installation of air pollution control equipment, as long as the environmental analysis includes the following:

- An analysis of reasonably foreseeable environmental impacts of the methods of compliance;
- An analysis of reasonably foreseeable feasible mitigation measures relating to those impacts; and
- An analysis of reasonably foreseeable alternative means of compliance with the rule or regulation, which would avoid or eliminate the identified impacts (CEQA Guidelines §15187(c)(1-3)).

The 2003 Final EA for Rule 1105.1 prepared by the SCAQMD complies with the requirements of CEQA Guidelines §15187. Furthermore, the 2003 Final EA contained a refinery-specific analysis of the impacts associated with complying with the rule, including the estimated impacts of the Ultramar Refinery's compliance with Rule 1105.1.

CEQA Guidelines §15189 establishes requirements for the lead agency to evaluate projects that consist solely of compliance with a performance standard or treatment standard, which were the subject of an environmental analysis described in CEQA Guidelines §15187. In preparing a negative declaration, mitigated negative declaration or EIR on the compliance project that was subject to a prior environmental analysis, the lead agency for the compliance project shall to the greatest extent feasible use the environmental analysis prepared pursuant to §15187, i.e., the prior environmental analysis (CEQA Guidelines §15189(a)). Therefore, the SCAQMD is relying on the analysis in the 2003 Final EA in the preparation of this Negative Declaration for the Ultramar Refinery Rule 1105.1 Compliance Project.

To comply with Rule 1105.1, the 2003 Final EA assumed that all of the existing ESPs at five of the six refineries would either be replaced with new models or rebuilt by December 31, 2006 or by December 31, 2008, if a requested extension was approved. The Negative Declaration for the Ultramar Refinery Rule 1105.1 Compliance Project relies and incorporates the assumptions used in the 2003 Final EA impacts analysis. However, for the Ultramar Refinery Rule 1105.1 Compliance project, the negative declaration refines these assumptions to incorporate the Ultramar Refinery's specific compliance situation.

- The 2003 Final EA assumed that only one ESP would be demolished and constructed or rebuilt at a time. The Ultramar Refinery Rule 1105.1 Compliance project will build one new ESP and will not demolish either of the two existing ESPs. This reduces construction impacts from the proposed project to below what was previously analyzed in the 2003 Final EA.
- The 2003 Final EA assumed that the demolition of an existing ESP and the construction activities to rebuild a new ESP would occur as Phases Ia and IIa, respectively, and plate cleaning preparation of an existing ESP and construction activities to rebuild the existing ESP would occur as Phases Ib and IIb, respectively. Operations of the new and/or modified ESPs would occur as Phase 3. Instead, the Ultramar Rule 1105.1 Compliance Project involves relocating some existing structures near the existing ESPs and constructing one new ESP. This

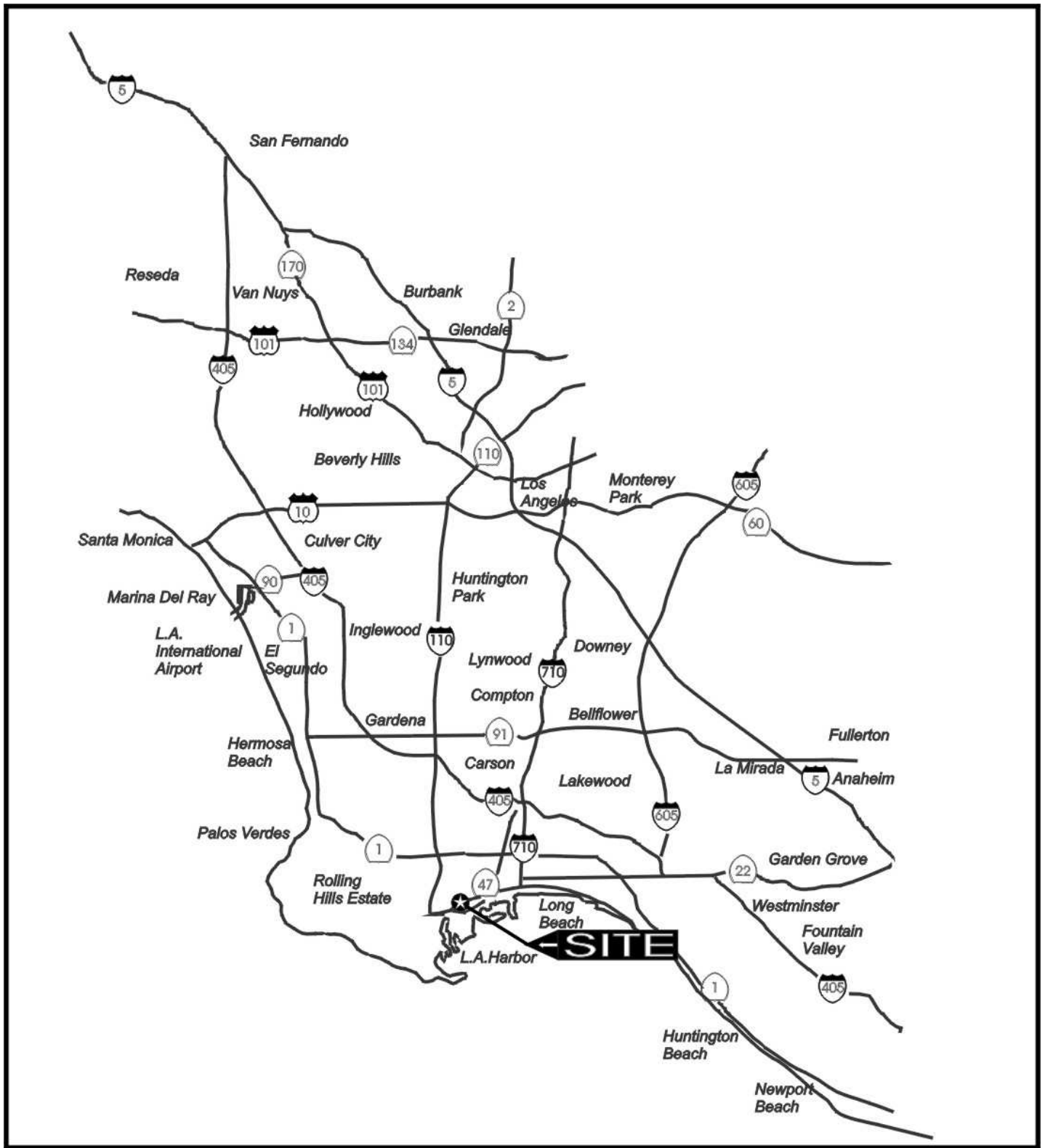
reduces construction impacts to below what was previously estimated and analyzed in the 2003 Final EA, as no demolition of existing ESPs is required.

- The use of specific types of construction equipment was assumed in the analysis of the 2003 Final EA for demolition and construction activities. The Ultramar Refinery will use a slightly different construction equipment mix than what was analyzed in the 2003 Final EA for these two activities (see Appendix A for further details). Construction impacts will be reduced compared to what was previously analyzed in the 2003 Final EA, as less equipment will be required.
- The 2003 Final EA assumed demolition and construction activities would occur for a maximum of 16 hours per day. For the Ultramar Refinery Rule 1105.1 Compliance Project, peak construction activities are expected to occur a maximum of eight hours per day throughout the entire project. Fewer hours of operation reduces daily construction emissions and related impacts compared to what was previously analyzed in the 2003 Final EA as fewer hours of construction per day are expected (see Table 2-4, page 2-12 herein).
- The 2003 Final EA assumed no or limited construction emissions from grading activities because the refinery operators were assumed to demolish the old ESPs and install new ESPs on the same foundations as the old ESPs. The Ultramar Refinery Rule 1105.1 project is consistent with this assumption. The Ultramar Refinery operators will construct a new ESP and leave the existing ESPs in place. As a result, grading is expected to be limited to approximately 0.05 acre for the construction of the new foundation for the new ESP, so only minimal grading is expected.

Accordingly, because the Ultramar Refinery Rule 1105.1 Compliance Project has the potential to only affect air quality, pursuant to CEQA Guidelines §15187 and §15189, the SCAQMD is only required to complete a further project specific analysis of the air quality impacts during construction activities as to what was previously analyzed in the 2003 Final EA. The environmental analysis in Chapter 2 of this document demonstrates that the construction and operation of one new ESP will not cause a new significant adverse environmental impact or make substantially worse, (i.e., beyond what was analyzed in the 2003 Final EA), an existing environmental impact requiring an EIR. An analysis of the environmental topics in the CEQA Guidelines indicates that the proposed project will not result in any new significant adverse environmental impacts, particularly air quality construction impacts; therefore, a Negative Declaration is the appropriate CEQA document for the proposed project.

### **1.6 PROJECT LOCATION**

The proposed project will occur at the Ultramar Refinery, which is located at 2402 East Anaheim Street, in the Wilmington District of the City of Los Angeles in the southern portion of Los Angeles County (see Figure 1-1). The proposed modifications are entirely within the property boundaries of the Ultramar Refinery.



## REGIONAL MAP



Figure 1-1

The Refinery is bounded to the north by Anaheim Street and industrial uses. Also northward of Anaheim Street is another major refinery complex. The Ultramar Refinery is bounded on the south by an area used previously for oil field production facilities and which is now developed for marine cargo transport and storage facilities and other Port of Long Beach related uses. A Hydrogen Plant is located adjacent to and immediately west of the Ultramar Refinery (west of the Dominguez Channel) on Henry Ford Avenue. To the west of Henry Ford Avenue are additional industrial and commercial uses and the Port of Los Angeles. To the east are automobile storage yards, a cogeneration plant and a petroleum coke calcining plant. The Terminal Island Freeway (State Route 103) runs through the Refinery boundaries. Historically, there were oil production facilities scattered throughout this general area, none of which are currently producing. The closest residential area is about one mile northwest of the Refinery in Wilmington.

### **1.7 LAND USE AND ZONING**

The Refinery is located in the Wilmington District of the City of Los Angeles within southern Los Angeles County. The community of Wilmington is generally urbanized and includes a substantial amount of industrial and port-related development. The Ports of Los Angeles and Long Beach are located along the coastal boundary of Wilmington.

The Wilmington area is bordered by the Harbor Freeway (Interstate 110) on the west, the Long Beach Freeway (Interstate 710) on the east, the San Diego Freeway (Interstate 405) on the north and the Pacific Ocean on the south. The Dominguez Channel runs adjacent to the Refinery from the north to the south. Railroad tracks service the area along the western boundary of the Refinery and along Alameda Street.

The proposed project is consistent with the zoning for the Refinery (M3-1) and with the Wilmington-Harbor City Plan (City of Los Angeles, 1999). All proposed modifications would occur within the confines of the existing Ultramar Refinery.

### **1.8 EXISTING REFINERY OPERATION**

Crude oils and distillates (both of which are also referred to as feedstocks), used by the Ultramar Refinery to produce gasoline and other petroleum products, are delivered to marine terminals in the Port of Los Angeles/Port of Long Beach by ship. Feedstocks are also delivered to the Ultramar Refinery by pipelines.

Crude oil is processed in the crude unit where it is heated and distilled into components, most of which are processed in downstream Refinery units. The heavy residual oil leaving the crude unit is further distilled in the vacuum unit to yield additional, lighter hydrocarbon products and the vacuum residuum. The lighter hydrocarbon components from the crude unit and vacuum unit are fed to other Refinery units for further processing, primarily the FCCU, gas oil hydrotreater, the Unibon, and the naphtha hydrotreater unit. The feedstocks are refined into the major Refinery products which include unleaded gasoline, diesel, jet fuels, low sulfur distillates, other distillate fuels, petroleum coke, and sulfur. Elemental sulfur and petroleum coke are produced as by-products of the refining process. Major processing units at the Refinery include the crude and



vacuum distillation, delayed coking, catalytic reforming, hydrotreating, fluid catalytic cracking, alkylation, sulfur recovery, and auxiliary systems. Under the existing Refinery configuration, about 78,000 bpd of crude oil, and about 50,000 bpd of distillates are purchased and processed. The proposed project will not affect crude throughput at the refinery in any way.

## **1.9 PROPOSED PROJECT MODIFICATIONS TO THE REFINERY**

### **1.9.1 Summary of Project Evaluated in 2003 Final EA**

Prior to the adoption of Rule 1105.1, the project was evaluated in the 2003 Final EA. The following is a summary of the project description in the 2003 Final EA and describes what the adoption of Rule 1105.1 would achieve:

1. Establish an emission standard from FCCUs for filterable PM10 at 3.6 pounds per hour; 2.8 pounds per 1,000 barrels (bbls) of fresh feed; or, 0.005 grains per dry standard cubic foot (gr/dscf), corrected to three percent dry oxygen.
2. Establish an emission standard for ammonia slip at ten parts per million by volume (ppmv), corrected to three percent dry oxygen, from FCCUs.
3. Establish an initial compliance date of December 31, 2006.
4. Establish an extension to the initial compliance date of no later than December 31, 2008, for the purpose of coordinating installation of the PM10 control equipment with the FCCU turnaround for refineries to meet the standards for filterable PM10 and ammonia slip emissions from FCCUs, provided that a facility submits a written request by July 1, 2006 (subject to SCAQMD approval).
5. Allow an additional extension of the December 31, 2008 compliance date up to 90 days after start-up for the facility operator to conduct performance tests provided that the FCCU turnaround has not been completed by that date and the FCCU is operating with all necessary control equipment.
6. Require the facility operator to submit an application at least 30 days prior to the initial or extended compliance date, as applicable, to elect to comply with one or more of the emission standards.
7. Establish initial and annual compliance testing requirements to determine actual PM10 and ammonia slip emissions from FCCUs.
8. Establish monitoring, recordkeeping and reporting requirements, to assure continuous compliance with the baseline (for existing control equipment) and future (for new control equipment) emission rates of PM10 and ammonia slip from FCCUs.

9. Specify test methods and calculation procedures for determining compliance with the PM<sub>10</sub> and ammonia slip emission standard requirements.
10. Exempt affected refineries from having to comply with the PM<sub>10</sub> and ammonia emission standards during startup and shutdown periods and for planned routine maintenance provided that each startup and shutdown period does not exceed 120 hours.
11. Exclude particulate emissions from existing CO boilers that are located downstream of existing electrostatic precipitators from the compliance demonstration for the filterable PM<sub>10</sub> emission limit standards.

The 2003 Final EA determined that six refineries in southern California operate FCCUs that would be subject to the requirements in Rule 1105.1. However, emissions data from one of the six refineries demonstrated compliance with Rule 1105.1. The 2003 Final EA evaluated both the direct and indirect air quality impacts of implementing Rule 1105.1 for the remaining five refineries. The 2003 Final EA assumed that operators of these five refineries would demolish their existing ESPs and construct new ESPs; or clean the plates of the existing ESPs and rebuild them by December 31, 2006, or by December 31, 2008, if a requested extension is approved. Other project-specific assumptions in the 2003 Final EA include the following:

- Because of space limitations at the five affected refineries, the need to keep operations going, and when each refinery has scheduled the next FCCU turnaround, only one ESP per refinery could potentially be demolished and/or constructed/rebuilt at a time.
- Due to refinery planning and permitting requirements, none of the refineries were expected to begin their modifications prior to 2004. Therefore, to derive the peak construction-related emissions, the construction activities were expected to occur over a 48-month period for the “worst-case.”
- Demolition of an existing ESP and construction of a new ESP would occur as Phases Ia and IIa, respectively.
- Plate cleaning preparation of an existing ESP and construction activities to rebuild the existing ESP would occur as Phases Ib and IIb, respectively.
- Operations of the new or modified ESPs would occur as Phase III.

The assumptions used in each phase of the construction activities in the 2003 Final EA are shown in Table 1-1.

The 2003 Final EA concluded that significant adverse impacts to air quality during the construction phase were expected to occur for CO, VOC, and NO<sub>x</sub> as a result of refinery projects needed to comply with Rule 1105.1 if any construction phases to demolish or construct new ESPs, etc., overlap. The following mitigation measures were imposed for affected refinery projects:

AQ-1 Develop a “Construction Traffic Emission Management Plan” for the proposed project. The plan shall include measures to minimize emissions from vehicles, including but not limited to: scheduling truck deliveries to avoid peak hour traffic conditions, consolidating truck deliveries, and prohibiting truck idling in excess of five minutes<sup>1</sup>.

**TABLE 1-1**

**Assumptions Used in 2003 Final EA<sup>1)</sup>**

Construction Phase	Number of Workers	Days/Hours of Construction	Construction Equipment Required
Phase Ia: ESP Demolition Activities	34	6 days/week 16 hours/day	3 cranes, 1 forklift, 2 flatbed trucks, 1 tractor trailer, 1 front-end loader, 1 pile driver/extractor.
Phase Ib: ESP Plate Cleaning Activities	38	6 days/week 16 hours/day	3 cranes, 1 forklift, 2 flatbed trucks, 1 tractor trailer, 1 front-end loader, 1 pile driver/extractor, and 1 vacuum truck.
Phase IIa: Construction of New ESP	34	5 days/week 16 hours/day	3 cranes, 1 forklift, 2 flatbed trucks, 1 tractor trailer, 1 front-end loader, 1 pile driver/extractor, 10 electric welders, and 10 acetylene torches.
Phase IIb: Rebuilding Existing ESP	38	6 days/week 20 hours/day	3 cranes, 1 forklift, 2 flatbed trucks, 1 tractor trailer, 1 front-end loader, 1 pile driver/extractor, 10 electric welders, and 10 acetylene torches.
Phase III: Operations of New/Rebuilt ESPs	0	N/A <sup>(2)</sup>	20 additional one-way truck trips per year.

(1) Source: SCAQMD, 2003, page 4-5.

(2) No additional workers were expected following completion of construction activities. The refineries would continue to operate 24 hours per day.

AQ-2 Suspend the use of all construction equipment during first-stage smog alerts.

AQ-3 Prohibit trucks from idling longer than five minutes<sup>1</sup>.

AQ-4 Use electricity or alternate fuels for on-site mobile equipment instead of diesel equipment to the extent feasible.

AQ-5 Maintain construction equipment by conducting regular tune-ups and retard diesel engine timing.

<sup>1</sup> Mitigation Measures AQ-1 and AQ-3 originally prohibited idling for longer than 10 minutes. Since that time, state legislation has been adopted that prohibits heavy-duty truck idling for five minutes or more.

- AQ-6 Use electric welders to avoid emissions from gas or diesel welders in portions of the project sites where electricity is available.
- AQ-7 Use on-site electricity rather than temporary power generators in portions of the project sites where electricity is available.
- AQ-8 Diesel powered construction equipment shall use low sulfur diesel, as defined in SCAQMD Rule 431.2, to the maximum extent feasible<sup>2</sup>.
- AQ-9 Prior to use in construction, the project applicant will evaluate the feasibility of retrofitting the large off-road construction equipment that will be operating for significant periods. Retrofit technologies such as particulate traps, selective catalytic reduction, oxidation catalysts, air enhancement technologies, etc., will be evaluated. These technologies will be required if they are certified by CARB and/or EPA and are commercially available and can feasibly be retrofitted onto construction equipment.

### 1.9.2 Ultramar Rule 1105.1 Compliance Project

The location of the proposed new ESP is shown in Figure 1-2. To comply with the filterable PM10 and ammonia requirements of SCAQMD Rule 1105.1, the Ultramar Refinery proposes to supplement the two existing ESPs with an additional downstream ESP.

The two existing ESPs, which are control devices to reduce FCCU PM emissions, operate in parallel downstream of the FCCU and have a common stack. Anhydrous ammonia is injected as needed to condition the PM upstream of the ESPs for optimal reduction efficiency. These two ESPs will be supplemented with a new ESP, which will be located downstream of the two existing ESPs, and the existing regenerator flue gas stack will be replaced with a new flue gas stack.

The proposed project consists of the following principal components:

- Continue using the two existing ESPs as part of the FCCU PM10 control system. Maintenance may be conducted on these devices to ensure continued proper operation.
- Modify, remove, or relocate the existing wastewater equipment that lies in the footprint of the new ESP.
- Install one new ESP downstream of the two existing ESPs.
- Replace the existing regenerator flue gas stack with a new flue gas stack.

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<sup>2</sup> Since the completion of the 2003 Final EA, all diesel-powered construction equipment will be required to use ultra-low sulfur diesel fuel beginning June 2006.

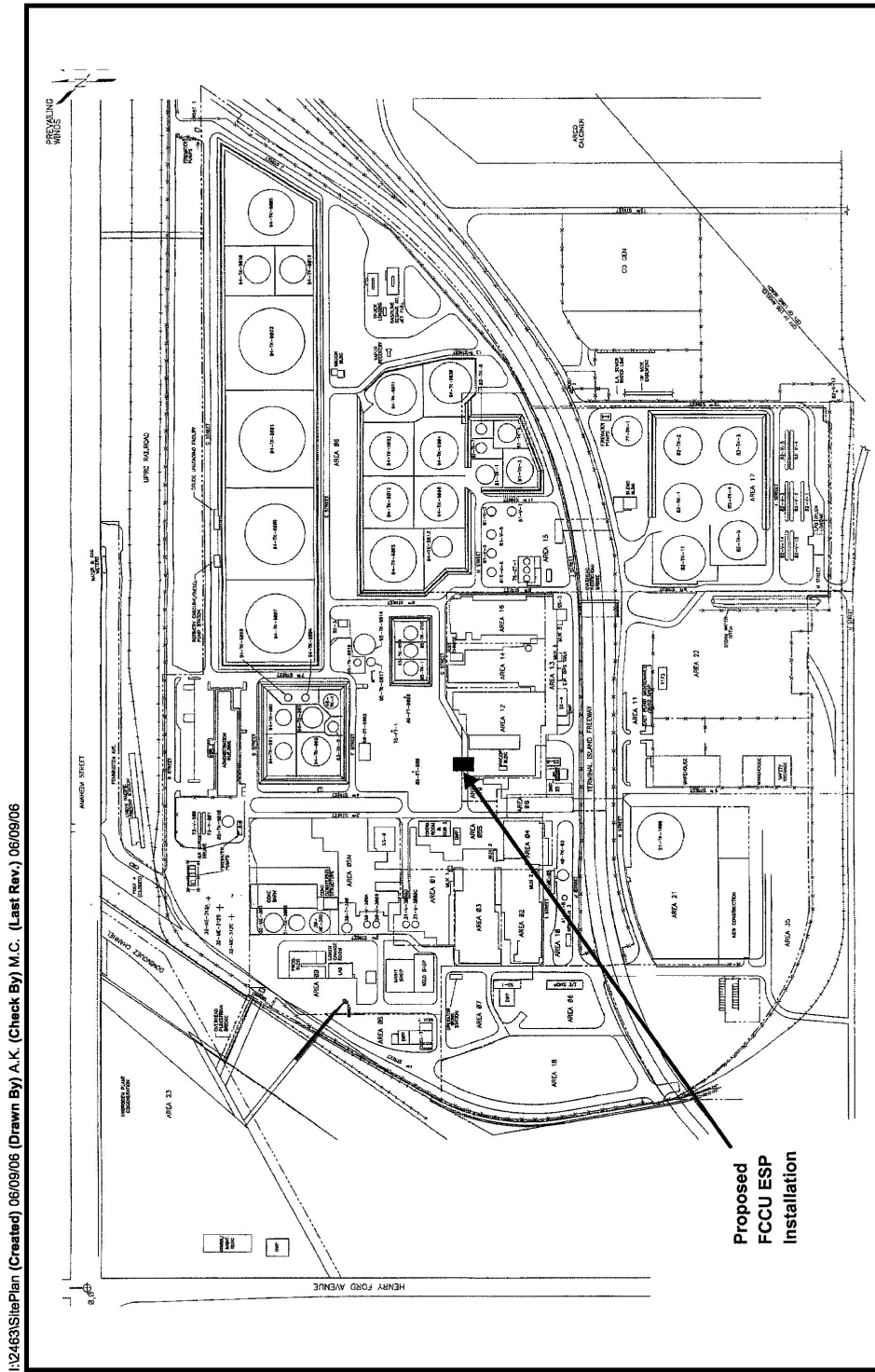


Figure 1-2

Project No. 2463

- Relocate the Continuous Opacity Monitoring System (COMS) and all Continuous Emissions Monitoring System (CEMS) from the existing stack to the new stack.

The new ESP will be constructed just north (downstream) of the existing ESPs across the facility road marking the perimeter of the FCCU. Abandoned and miscellaneous wastewater equipment occupying the proposed site will also be modified, removed or relocated to make space for the new ESP foundation. As discussed above, these improvements are required to meet the SCAQMD Rule 1105.1 emission limits for filterable PM10 and ammonia on a continuous and long-term basis.

The number of truck trips transporting material collected by ESPs (referred to as the ESP hopper catalyst fines) to cement manufacturers will decrease despite an increase in the amount of catalyst fines collected after the installation of the new ESPs. Currently, the ESP hoppers are not heated, allowing the fines to cool and attract atmospheric moisture. Additional water is used to create a slurry capable of flowing the catalyst fines into transport trucks. The new ESP hoppers will be electrically heated to keep the fines dry, eliminating the need for water; thus, reducing the volume of material hauled off-site.

All COMS and CEMS will be relocated from the existing stack to the new stack. The new stack will be built in the same location as the existing stack. SCAQMD Rule 1105.1 monitoring requirements for ESPs include flue gas temperature, flue gas flow rate, voltage and current across the ESP, and ammonia injection rates.

The 2003 Final EA mitigation measures for construction activities are included as part of the Ultramar Refinery Rule 1105.1 proposed project.

## **CHAPTER 2**

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### **ENVIRONMENTAL CHECKLIST FORM AND RESPONSES**

Introduction  
General Information  
Environmental Factors Potentially Affected  
Determination  
Environmental Checklist and Discussion  
    Aesthetics  
    Agriculture Resources  
    Air Quality  
    Biological Resources  
    Cultural Resources  
    Energy  
    Geology and Soils  
    Hazards and Hazardous Materials  
    Hydrology and Water Quality  
    Land Use and Planning  
    Mineral Resources  
    Noise  
    Population and Housing  
    Public Services  
    Recreation  
    Solid/Hazardous Wastes  
    Transportation/Traffic  
    Mandatory Findings of Significance  
References





## INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

## GENERAL INFORMATION

Project Title:	Ultramar Inc. Valero Wilmington Refinery Rule 1105.1 Compliance Project
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
Contact Person:	James Koizumi
Contact Phone Number:	(909) 396-3234
Project Sponsor's Name:	Ultramar Inc., Valero Wilmington Refinery (Ultramar Refinery)
Project Sponsor's Address:	2402 East Anaheim Street, Wilmington (Los Angeles), California
General Plan Designation:	Refinery – Heavy Industrial
Zoning:	Refinery – M3-1 Heavy Industrial
Description of Project:	The proposed project consists of the addition of one new ESP at the Ultramar Refinery to comply with the Rule 1105.1 – Reduction of PM10 and Ammonia Emissions from Fluid Catalytic Cracking Units.
Surrounding Land Uses and Setting:	Industrial and commercial uses including petroleum refining, hydrogen production facilities, storage tank facilities, distribution terminals, containerized cargo operations, and scrap yards.
Other Public Agencies Whose Approval is Required:	City of Los Angeles California Coastal Commission

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with a "√" may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Aesthetics            | <input type="checkbox"/> Agriculture Resources         | <input checked="" type="checkbox"/> Air Quality                   |
| <input type="checkbox"/> Biological Resources  | <input type="checkbox"/> Cultural Resources            | <input type="checkbox"/> Energy                                   |
| <input type="checkbox"/> Geology/Soils         | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/<br>Water Quality              |
| <input type="checkbox"/> Land Use/Planning     | <input type="checkbox"/> Mineral Resources             | <input type="checkbox"/> Noise                                    |
| <input type="checkbox"/> Population/Housing    | <input type="checkbox"/> Public Services               | <input type="checkbox"/> Recreation                               |
| <input type="checkbox"/> Solid/Hazardous Waste | <input type="checkbox"/> Transportation/<br>Traffic    | <input type="checkbox"/> Mandatory<br>Findings of<br>Significance |

## DETERMINATION

On the basis of this initial evaluation:

- ☒ I find the proposed project COULD NOT have a significant effect on the environment, and that a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: February 6, 2007

Signature:

*Steve Smith*

Steve Smith, Ph.D.  
Program Supervisor  
Planning, Rules, and Area Sources

## ENVIRONMENTAL CHECKLIST AND DISCUSSION

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>1.0 AESTHETICS.</b> Would the project:			
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

---

### 1.1 Significance Criteria

The proposed project impacts on aesthetics will be considered significant if:

The project will block views from a scenic highway or corridor.

The project will adversely affect the visual continuity of the surrounding area.

The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

### 1.2 Environmental Setting and Impacts

**1. a), b), and c)** As discussed in Appendix C, page 2-3 of 2003 Final EA, the potential for aesthetic impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to be less than significant. Because the currently proposed project consists of a single refinery's activities to comply with Rule 1105.1, aesthetics impacts from the Ultramar Rule 1105.1 Compliance Project are within the scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1.

Construction activities are not expected to adversely impact views and aesthetics since most of the heavy equipment and activities will occur in the center portion of the Refinery. The majority of construction equipment is low in height and will not be visible to the surrounding area due to the presence of fencing and structures, which buffer the views of low structures at the Refinery. A few cranes may temporarily be visible to the surrounding industrial areas and to people traveling on the Terminal Island Freeway (since the freeway is elevated and bisects the Refinery). Residential areas are located about one mile away and construction activities are not expected to be noticeable in these areas due to the distance from the Refinery.

Also discussed in the 2003 Final EA was that new and/or modified ESPs are expected to be installed and that the ESPs would be about the same size profile as existing equipment within the Refinery. For the Ultramar Refinery, one new ESP will be installed near the existing ESPs, such that the general appearance of the new ESP is not expected to differ substantially from the two existing parallel ESPs. Further, the installation of new add-on control equipment at the existing facility, would not appreciably change the visual profile of the entire facility. The proposed project also will replace the existing regenerator flue gas stack, which is 160 feet tall, with a new flue gas stack of the same height, at the same location. In light of these considerations, no significant adverse impacts to aesthetics are expected from implementing the Ultramar Refinery Rule 1105.1 Compliance Project.

No scenic highways or corridors are located in the vicinity of the Refinery. No significant adverse aesthetic impacts are expected.

**1. d)** As discussed in Appendix C, on pages 2-3 and 2-4 of the 2003 Final EA, new lighting may be provided as necessary in accordance with applicable safety standards on new structures constructed as a result of the Ultramar Refinery complying with Rule 1105.1. If installed, the lighting is expected to be consistent with existing lighting at the Refinery. However, the new lights are not expected to create new light and glare impacts to areas adjacent to the Refinery due to the industrial nature of the refineries and the fact that refineries are typically lighted at night for safety reasons.

Specifically, for the proposed Ultramar Refinery Rule 1105.1 Compliance project, construction activities are not anticipated to require additional lighting because they are scheduled to take place during daylight hours. Since the project location is completely located within the boundaries of the existing Refinery, additional temporary lighting is not expected to be required and would not be discernible from the existing permanent night lighting.

Additional permanent light sources will be installed on the new equipment to provide illumination for operations personnel at night, in accordance with applicable safety standards. These additional light sources are not expected to create an impact because the project components will be located within an existing industrial facility, which is already lighted at night for nighttime operations. Further, residential areas are located about one mile away from the Refinery so additional lighting at the site is not expected to be noticeable in residential areas. Therefore, no significant impacts to light and glare are anticipated from the proposed project.

### **1.3 Conclusion**

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to aesthetics are expected to occur as a result of construction and operational activities that Refinery operators would undertake in order to comply with Rule 1105.1. The Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to aesthetics. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase to previously analyzed impacts or new impacts that would result in an overall significant adverse impact on aesthetics resources. Since no significant aesthetic impacts were identified, no mitigation is required or proposed.

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	<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>2.0 AGRICULTURE RESOURCES.</b>			
Would the project:			
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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### **2.1 Significance Criteria**

Project-related impacts on agricultural resources will be considered significant if any of the following conditions are met:

The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.

The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.

The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural uses.

## 2.2 Environmental Setting and Impacts

2. a), b), and c) As discussed in Appendix C, pages 2-4 and 2-5 of the 2003 Final EA, the potential for agricultural resources impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to be less than significant. All construction and operational activities that would occur as a result of the proposed project at the Ultramar Refinery will occur within the boundaries of the existing Refinery. The proposed project would be consistent with the heavy industrial zoning for the Refinery and there are no agricultural resources or operations on or near the Ultramar Refinery. Based upon the above considerations, significant agricultural resources impacts are not expected from the Ultramar Refinery Rule 1105.1 Compliance Project.

## 2.3 Conclusion

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to agricultural resources are expected to occur as a result of construction and operational activities that refinery operators would undertake in order to comply with Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to agricultural resources. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase to previously analyzed impacts or new impacts that would result in an overall significant adverse impact on agricultural resources. Since no significant agricultural resources impacts were identified, no mitigation is required or proposed.

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	Potentially Significant Impact	Less Than Significant Impact	No Impact
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## 3.0 AIR QUALITY. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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### **3.1 Significance Criteria**

Impacts will be evaluated and compared to the significance criteria in Table 2-1. If impacts equal or exceed any of those criteria, they will be considered significant.

### **3.2 Environmental Setting and Impacts**

**3. a and f)** As discussed in Appendix C, page 2-5 to 2-7 of the 2003 Final EA, SCAQMD Rule 1105.1 was implemented to reduce PM10 and ammonia slip (a PM10 precursor) emissions from FCCUs pursuant to Control Measure 97CMB-09 in the 1997 AQMP, as amended in 1999. Compliance with Rule 1105.1 is expected to reduce emissions by 0.5 ton per day of solid filterable PM10, and about two tons per day of condensable PM10 from all refineries affected by Rule 1105.1, by the time of final rule implementation (SCAQMD, 2003). Air quality impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 are expected to significantly contribute to the overall improvement of air quality in the region. The Ultramar Refinery Rule 1105.1 Compliance Project, which is solely being undertaken for the purpose of complying with SCAQMD Rule 1105.1, will result in emission reductions of PM10 due to the installation of a new, more efficient ESP in conjunction with the two existing parallel ESPs, and therefore, is within the scope of the larger project evaluated in the 2003 EA for Rule 1105.1. The proposed project will implement the SCAQMD's AQMP control measure, and will



assist the Basin in moving towards attainment of the state and national ambient air quality standards for PM10, as well as PM2.5.

**TABLE 2-1**  
**Air Quality Significance Thresholds**

Mass Daily Thresholds		
Pollutant	Construction	Operation
NO <sub>x</sub>	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SO <sub>x</sub>	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs) and Odor Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality for Criteria Pollutants <sup>(a)</sup>		
NO <sub>2</sub>  1-hour average annual average	In attainment; significant if project causes or contributes to an exceedance of any standard: 0.25 ppm (state) 0.053 ppm (federal)	
PM10 24-hour  annual geometric mean annual arithmetic mean	10.4 ug/m <sup>3</sup> (recommended for construction) <sup>(b)</sup> 2.5 ug/m <sup>3</sup> (operation) 1.0 ug/m <sup>3</sup> 20 ug/m <sup>3</sup>	
PM2.5 24-hour average	10.4 µg/m <sup>3</sup> (construction) <sup>e</sup> & 2.5 µg/m <sup>3</sup> (operation)	
Sulfate 24-hour average	25 ug/m <sup>3</sup>	
CO  1-hour average 8-hour average	In attainment; significant if project causes or contributes to an exceedance of any standard: 20 ppm (state) 9.0 ppm(state/federal)	
<sup>(a)</sup> Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.		
<sup>(b)</sup> Ambient air quality threshold based on SCAQMD Rule 403.		
ppm = parts per million;    µg/m <sup>3</sup> = microgram per cubic meter;    mg/m <sup>3</sup> = milligram per cubic meter; lbs/day = pounds per day;    ≥ greater than or equal to		

The 2003 AQMP demonstrates that applicable ambient air quality standards can be achieved within the timeframes required under federal law. This project must comply with applicable SCAQMD requirements and control measures for new or modified sources. It must also comply with prohibitory rules, such as Rule 403, for the control of fugitive dust. By meeting these requirements, the project will be consistent with the goals and objectives of the AQMP.

**3. b, c, and d) Construction Emissions:** The construction air quality analysis in the 2003 Final EA (pages 4-3 through 4-10) evaluated two compliance scenarios that could occur at any one of the five affected refineries<sup>3</sup>. Compliance scenario #I consisted of the following two phases that could occur at any one of the five affected refineries: Phase Ia - Demolition (of existing ESP), and Phase IIa - Construct New ESP. Compliance scenario #II consisted of the following two phases that could occur at any one of the five affected refineries: Phase Ib – Plate Cleaning (activity that occurs prior to rebuilding an ESP), and Phase IIb - Rebuild Existing ESP. These scenarios do not make any assumptions regarding where (i.e., which refineries) the scenarios may occur, only that two scenarios could occur concurrently. Construction emissions were calculated for each construction phase of both scenarios. It was assumed in the 2003 Final EA that, under both compliance scenarios, the first phase construction activities and the second phase construction activities could overlap. It was further assumed that, at any given time, construction activities from each construction phase for both compliance scenarios could overlap. Overlapping emissions from the four phases were summed and compared to the applicable SCAQMD significance threshold. As shown in Table 2-2, from the 2003 Final EA, CO, VOC, and NO<sub>x</sub> construction emissions from the Rule 1105.1 implementing would exceed the applicable significance thresholds.

The Ultramar Refinery Rule 1105.1 Compliance Project is consistent with the project evaluated in the 2003 Final EA construction of new ESPs (Phase IIa), although smaller in scope. Specifically, the Ultramar Refinery Rule 1105.1 Compliance Project consists of the following components, which will occur over three phases.

- Phase 1: Modify, remove or relocate the existing wastewater equipment that lies in the footprint of the new ESP.
- Phase 2: Install one new ESP downstream of the two existing ESPs.
- Phase 3: Replace the existing regenerator flue gas stack with a new flue gas stack and relocate the COMS and CEMS from the existing stack to the new stack.

The differences between the construction activities evaluated in the 2003 Final EA and the proposed project construction activities are minor; however, the Ultramar Refinery Rule 1105.1 Compliance Project is smaller in scope than the project evaluated in the 2003 Final EA. For example, instead of calculating construction emissions from overlapping phases of one scenario #I plus one scenario #II (demolish existing ESP and construct a new ESP + clean plates of existing ESP and rebuild existing ESP), the Ultramar Refinery Rule 1105.1 Compliance Project does not include demolition of the existing two ESPs, although some minor ancillary equipment

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<sup>3</sup> Though there are six refineries that have FCCUs subject to Rule 1105.1, one refinery is already in compliance with Rule 1105.1.

is expected to be relocated. Grading for the Ultramar Refinery project is expected to be limited to a 70 by 40 feet area (about 0.05 acre). (Note: the 2003 Final EA assumed that no grading would be required because the refineries have been graded and paved). In addition, a slightly different mix of construction equipment is required for the Ultramar Refinery proposed project. Emission calculations for the Ultramar Refinery's construction activities required to comply with Rule 1105.1 have been completed (see Appendix A) for each month of the construction phase and the peak emissions are summarized in Table 2-3.

**TABLE 2-2**  
**Maximum Daily Construction Emissions from**  
**2003 Final EA for Rule 1105.1\***

<b>Peak Construction Activity</b>	<b>CO (lb/day)</b>	<b>VOC (lb/day)</b>	<b>NO<sub>x</sub> (lb/day)</b>	<b>SO<sub>x</sub> (lb/day)</b>	<b>PM10 (lb/day)</b>
Phase Ia: Demolition	136	29	210	17	12
Phase IIa: Construct New ESP	136	29	210	17	12
Phase Ib: Plate Cleaning	139	29	211	17	12
Phase IIb: Rebuild Existing ESP	167	35	262	22	14
<b>Total Offsite and Onsite from both Phases</b>	<b>578</b>	<b>122</b>	<b>893</b>	<b>73</b>	<b>50</b>
<b>SIGNIFICANCE THRESHOLD</b>	550	75	100	150	150
<b>SIGNIFICANT?</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>NO</b>	<b>NO</b>

\*SCAQMD, 2003. This table was published originally in the 2003 Final EA on page 4-10 as Table 4-6. Note that the peak activity from the 2003 Final EA was not for a specific date.

**TABLE 2-3**  
**The Ultramar Refinery Peak<sup>(1)</sup> Construction Emissions for**  
**Compliance with Rule 1105.1 (Lbs/Day)**

<b>ACTIVITY</b>	<b>CO</b>	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>SO<sub>x</sub></b>	<b>PM10</b>
Construction Equipment	27.64	10.89	77.41	0.07	2.73
Vehicle Emissions (including road dust)	34.85	2.31	4.12	0.02	1.00
Fugitive Construction Emissions <sup>(2)</sup>	--	--	--	--	15.37
Total Ultramar Refinery Construction Emissions	62.49	13.20	81.53	0.09	19.11
SCAQMD Threshold Level	550	75	100	150	150
Significant?	NO	NO	NO	NO	NO

1. Peak emissions for NO<sub>x</sub>, VOC, and SO<sub>x</sub> are predicted to occur during June 2008. Peak emissions of CO are predicted to occur during July 2008. Peak PM10 emissions are expected to occur during December 2007.

2. Assumes application of water three times per day.

As discussed above, although there are minor differences between the construction scenario analyzed in the 2003 Final EA and the Ultramar Refinery Rule 1105.1 Compliance Project, the total construction emissions associated with the Refinery's construction activities are expected to be less than the construction activities evaluated by the SCAQMD in the 2003 Final EA and less than the SCAQMD significance thresholds. Table 2-4 shows that emissions from the Ultramar Refinery Rule 1105.1 Compliance Project are less than peak daily construction emissions calculated in the 2003 Final EA for Rule 1105.1, which evaluated two construction scenarios occurring concurrently. As a result, the Ultramar Refinery Rule 1105.1 Compliance Project does not generate any new significant adverse construction air quality impacts that were not already evaluated and presented in the 2003 Final EA. Since significant adverse construction air quality impacts were already identified in the 2003 Final EA, which went through a public review and adoption process, and since peak daily construction air quality impacts for the Ultramar Refinery Rule 1105.1 Compliance Project are less than construction air quality impacts calculated in the 2003 Final EA, the proposed project is not expected to create any new significant adverse impacts or make substantially worse existing significant adverse impacts that were identified in the 2003 Final EA<sup>4</sup>. Thus, construction air quality impacts for the Ultramar Rule 1105.1 Compliance Project are determined to be less than significant.

**TABLE 2-4**

**Comparison of the Ultramar Refinery Peak Construction Emissions For Compliance with Rule 1105.1 vs. Maximum Daily Construction Emissions from the 2003 Final EA for Rule 1105.1 (lbs/Day)**

ACTIVITY	CO	VOC	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>
Total Ultramar Refinery Peak Construction Emissions <sup>(1)</sup>	62.49	13.20	81.53	0.09	19.11
Total 2003 Final EA Construction Emissions from both Phases <sup>(2)</sup>	578	122	893	73	50
Difference between 2003 Final EA and the Ultramar Refinery's Peak Construction Emissions	-515.51	-108.80	-811.47	-72.91	-30.89
SCAQMD Threshold Level	550	75	100	150	150
Significant?	NO	NO	NO	NO	NO

(1) See Table 2-3.

(2) SCAQMD, 2003

CEQA Guidelines indicate that cumulative impacts of a project shall be discussed when the project's incremental effect is cumulatively considerable, as defined in CEQA Guidelines §15065(a)(3). SCAQMD policy defines cumulatively considerable air quality impacts as

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<sup>4</sup> CEQA Guidelines §15189(a) states, "If preparing a negative declaration, mitigated negative declaration or EIR on the compliance project the lead agency for the compliance project shall, to the greatest extent feasible, use the environmental analysis prepared pursuant to §15187 [Environmental Review of New Rules and Regulations]."

impacts that exceed project-specific significance thresholds. It is for this reason the SCAQMD's air quality significance thresholds apply to both project-specific and cumulative impacts. Since construction emissions from the proposed project do not exceed the applicable significance threshold, they are not considered to be cumulatively considerable. As a result, the proposed Ultramar Refinery Rule 1105.1 Compliance Project is not expected to create significant adverse project-specific or cumulative air quality impacts for construction emissions.

Construction emissions were also compared to the SCAQMD's localized significance thresholds (SCAQMD, 2003; see Table 2-5). The estimated construction emissions associated with the Ultramar Refinery Rule 1105.1 Compliance Project were compared to the localized significance thresholds for CO, NO<sub>x</sub>, and PM<sub>10</sub>. In all cases, the construction emissions were below the localized significance thresholds (see Appendix A). Therefore, no significant adverse localized air quality impacts are expected during the construction phase.

**TABLE 2-5**

**Localized Significance Threshold Emissions Comparison**

	Emissions (lbs/day)		
	CO	NO <sub>x</sub>	PM <sub>10</sub>
Total Construction Emissions <sup>(1)</sup>	34.8	77.4	18.1
Localized Significance Threshold <sup>(2)</sup>	6547	311	242
Significant	No	No	No

(1) The sum of the highest peak day on-site construction emissions only

(2) Source: Localized Significance Threshold Methodology, SCAQMD, 2003 for resource receptor area No. 4, southcoastal Los Angeles County, 1 acre closest receptor is greater than 500 meters.

**Operational Emissions:** Long-term PM<sub>10</sub> emissions will decrease as a result of the proposed project. The objective of Rule 1105.1 is to lower PM<sub>10</sub> and ammonia slip emissions from FCCUs. The Ultramar Refinery Rule 1105.1 Compliance Project is identical to the project evaluated in the 2003 Final EA for Rule 1105.1 because implementation is being achieved by installing a new ESP, which was evaluated in the 2003 Final EA for Rule 1105.1. Therefore, the overall operational activities will result in a decrease in PM<sub>10</sub> and ammonia emissions (and the related secondary particulate emissions) and no significant adverse air quality impacts during project operation are expected.

The Ultramar Refinery Rule 1105.1 Compliance Project will have the capability of using ammonia injection in the new ESP. However, the Refinery does not anticipate that it will need to inject ammonia because the new ESP, in conjunction with the two existing parallel ESPs, has been designed to comply with Rule 1105.1 without ammonia injection. In the event injection is used, the Ultramar Refinery will comply with the 10 ppm ammonia slip limit in Rule 1105.1. Accordingly, based on these considerations, neither the project analyzed in the 2003 Final EA, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase to previously analyzed impacts or new impacts that would result in overall significant adverse impacts to air quality.

Cumulative air quality impacts from implementing Rule 1105.1 and all other AQMP control measures considered together, are not expected to be significant because implementation of existing rules with future compliance dates and all AQMP control measures are expected to result in net emission reductions of 0.5 ton per day of solid filterable PM10 and about two tons per day of condensable PM10 by final rule implementation and overall air quality improvement (SCAQMD, 2003).

The operational emissions from the proposed project will be a decrease in PM10 and ammonia slip emissions from the Ultramar FCCU. Therefore, the proposed project is expected to provide an overall emission benefit to the surrounding population, including sensitive receptors. No significant impacts are expected to sensitive receptors as PM10 and ammonia emissions from the Refinery operation will be decreased.

**3. e)** As discussed in Appendix C, on Page 2-6 of the 2003 Final EA for Rule 1105.1, the Ultramar Rule 1105.1 Compliance Project is not expected to create significant objectionable odors, either during construction or during operations. Sulfur compounds (e.g. hydrogen sulfide) are the primary odor sources within refinery operations. As a result of constructing a new ESP, the proposed project is expected to remove additional sulfur and sulfur bearing compounds (as particulates) from the Refinery process streams and, thus, reduce the potential to create odors.

The proposed project is also expected to minimize ammonia slip by limiting the amount of ammonia injected into the flue gas stream of the FCCUs. According to dispersion estimates, the buoyancy of ammonia and its dilution into the atmosphere would reduce the annual one-hour maximum ground concentration to less than one part per million (ppm) based on an ammonia slip concentration of 10 ppm. A concentration of one ppm is well below the odor detection maximum limit (SCAQMD, 2003, page 2-6). Therefore, no significant odor impacts are expected from the implementation of the proposed project.

### **3.3 Conclusion**

The 2003 Final EA concluded that significant adverse impacts to air quality during the construction phase were expected to occur for CO, VOC, and NOx as a result of refinery projects needed to comply with Rule 1105.1. The result of the analysis for the Ultramar Refinery Rule 1105.1 Compliance Project indicates that the project emissions are substantially less than evaluated in the 2003 Final EA and less than the SCAQMD significance thresholds. Therefore, the impacts of the Ultramar Refinery Rule 1105.1 Compliance Project are less than significant and no additional mitigation measures are required.

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	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>4.0. BIOLOGICAL RESOURCES.</b> Would the project:			
a) Have substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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#### 4.1 Significance Criteria

The impacts on biological resources will be considered significant if any of the following criteria apply:

The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.

The project interferes substantially with the movement of any resident or migratory wildlife species.

The project adversely affects aquatic communities through construction or operation of the project.

#### 4.2 Environmental Setting and Impacts

**4. a), b), c), d), e), and f)** As discussed in Appendix C, page 2-7 and 2-8 of the 2003 Final EA, the potential for biological resources impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to have no impact. Because the currently proposed project consists of a single Refinery's activities to comply with Rule 1105.1, biological resources impacts from the Ultramar Refinery's Rule 1105.1 Compliance Project are within the scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1.

The proposed project will be located in a heavily industrialized area, entirely within the boundaries of an existing industrial facility. The Refinery has been fully developed and is essentially void of vegetation with the exception of some landscape vegetation near administration buildings. The Refinery controls the growth of vegetation at the site for fire prevention purposes. All native habitats have long since been removed from the site. The proposed project does not include the acquisition of additional land for use by the Refinery or expansion outside of the Refinery's current boundaries, which further eliminates the potential for biological resource impacts. The proposed project will not have an adverse effect, either directly or indirectly or through habitat modifications, on any sensitive biological species, riparian habitat, or other sensitive natural habitat. The proposed project will not result in the addition or the elimination of water ponds that could be used by animals or migratory fowl. Further, the proposed project will not adversely affect federally protected wetlands as defined in §404 of the Clean Water Act. The Dominguez Channel is a concrete lined flood control channel near the Ultramar Refinery. There are no significant plant or animal resources, locally designated species, natural communities, wetland habitats, or animal migration corridors that would be adversely affected by the proposed project. There are no rare, endangered, or threatened species at the Refinery site. The project would not adversely affect any local policies or ordinances that protect biological resources or conflict with the provisions of a Habitat Conservation Plan or other similar plan. Because the area in and near the Refinery is devoid of native habitat, impacts to other, non-listed species are not expected. Based on the above, no significant adverse impacts on biological resources are expected from the proposed project so mitigation measures are not required.



### 4.3 Conclusion

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to biological resources are expected to occur as a result of construction and operational activities that refinery operators would undertake in order to comply with Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to biological resources. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase to previously analyzed impacts or new impacts that would result in an overall significant adverse impact on biological resources. Since no significant biological resources impacts were identified, no mitigation is required or proposed.

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	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>5.0 CULTURAL RESOURCES.</b> Would the project:			
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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### 5.1 Significance Criteria

Impacts to cultural resources will be considered significant if:

The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group.

Unique paleontological resources are present that could be disturbed by construction of the proposed project.

The project would disturb human remains.

## **5.2 Environmental Setting and Impacts**

**5. a, b, c, and d)** As discussed in Appendix C, page 2-9 of the 2003 Final EA, the potential for cultural resources impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to be less than significant. Because the currently proposed project consists of a single refinery's activities to comply with Rule 1105.1, cultural resources impacts from the Ultramar Refinery Rule 1105.1 Compliance Project are within the scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1.

There are no prehistoric or historic structures or objects within the Refinery or adjacent areas. The proposed improvements will be constructed within the confines of the existing Refinery and not affect structures in the surrounding area. No existing structures at the Refinery are considered architecturally or historically significant by the City or any other group.

The entire Refinery site has been previously graded and developed. The larger Refinery structures and equipment are supported on concrete foundations. The remainder of the site is unpaved. Any archaeological or paleontological resources that may have been present prior to development of the Refinery are not expected to be found at the site due to past disturbance. In addition, no known recorded archaeological sites are located at or near the Refinery.

No known human remains or burial sites have been identified at the Refinery during previous construction activities so the proposed project is not expected to disturb any human remains.

## **5.3 Conclusion**

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to cultural resources are expected to occur as a result of construction and operational activities that refinery operators would undertake in order to comply with Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any significant adverse impacts to cultural resources. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase to previously analyzed impacts or new impacts that would result in an overall significant adverse impact on cultural resources. Since no significant cultural resources impacts were identified, no mitigation is required or proposed.

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	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>6.0 ENERGY.</b> Would the project:			
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the need for new or substantially altered power or natural gas utility systems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with existing energy standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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## 6.1 Significance Criteria

The impacts to energy resources will be considered significant if any of the following criteria are met:

The proposed project conflicts with adopted energy conservation plans or standards.

The proposed project results in substantial depletion of existing energy resource supplies.

An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.

The proposed project uses non-renewable resources in a wasteful and/or inefficient manner.

## 6.2 Environmental Setting and Impacts

**6. a and e)** As discussed in Appendix C, page 2-10 of the 2003 Final EA, the potential for energy impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to have no impact. Because the currently proposed project consists of a single refinery's activities to comply with Rule 1105.1, energy impacts from the Ultramar Rule 1105.1 Compliance Project are within the scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1.

The proposed project is not expected to conflict with an adopted energy conservation plan because there are no known energy conservation plans that would be impacted by the proposed project. Further, the proposed project and operation activities will not utilize non-renewable resources in a wasteful or inefficient manner. The proposed project will comply with existing energy standards.

**6. b), c), and d)** As discussed in Appendix C, on Page 2-10 of the 2003 Final EA, any additional electricity required is typically supplied by each refinery's cogeneration units or by the local electrical utility, as appropriate, so it is not anticipated that new or substantially altered power utility systems will need to be built to accommodate any additional electricity demands that may be created by the Ultramar Rule 1105.1 Compliance Project. As discussed in Appendix C, on Page 2-10 of the 2003 Final EA, electrical power may be required for certain construction equipment. This requirement can be met with the existing electrical capacity at each of the refineries. Typically, a minimal amount of natural gas may also be required during construction of the proposed project and can be supplied by either the refineries or the local utility. No significant impacts to electrical or natural gas utilities are expected due to construction activities.

Electrical power may be required for certain construction equipment, e.g., electric welders, lights, etc. However, most of the construction equipment is operated using gasoline and diesel fuels. The electricity requirement for the construction phase is expected to be within the normal electricity usage of the Refinery since electric welders require minimal electricity (about 35-50 horsepower). This requirement can be met with the existing electrical capacity so no significant impact on electricity is expected during the construction phase.

No significant increase in natural gas is expected during the construction phase of the proposed project since most of the construction equipment will be operated using gasoline and diesel fuels. None of the construction equipment is expected to use natural gas; therefore, no significant impacts to natural gas utilities are expected due to construction activities.

Operation of the proposed project will require an additional increase of about 1.75 megawatt hours per year of electricity. This electricity will be supplied by the Los Angeles Department of Water and Power (LADWP). The LADWP is the largest of the public-owned electric utilities in southern California and provides electricity service to most customers located in the City of Los Angeles. The LADWP has the capacity to supply more than 26.9 million megawatt hours of electricity a year. The May 2006 LADWP Draft Integrated Resource Plan forecasts 23.8 million megawatt hours of electricity in sales for 2006 (LADWP, 2006). Based on the above, the LADWP has sufficient electricity generation capacity to handle the estimated increase of 1.75 megawatts of electricity from the proposed project. This electrical use will result in a small incremental increase in electricity supplied to the Refinery by LADWP and is not expected to be significant because it represents an extremely small percentage of the total electricity generating capacity.

The proposed project will not require additional natural gas or refinery fuel gas as part of the operation of the new ESP. Based upon the above considerations, the energy impacts during the construction and operation phases of the proposed project are expected to be less than

significant. Therefore, the proposed project will not create any significant effects on local or regional energy supplies or on peak and base period demands for energy.

### 6.3 Conclusion

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to energy are expected to occur as a result of construction and operational activities that refinery operators would undertake in order to comply with Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to energy. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase to previously analyzed impacts or new impacts that would result in an overall significant adverse impact on energy. Since no significant energy impacts were identified, no mitigation is required or proposed.

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	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>7.0 GEOLOGY AND SOILS.</b> Would the project:			
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994),	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

creating substantial risks to life or property?

- e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? ☐ ☐ ☒

### 7.1 Significance Criteria

The impacts on the geological environment will be considered significant if any of the following criteria apply:

Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.

Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.

Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.

Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.

Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

### 7.2 Environmental Setting and Impacts

**7. a)** As discussed in Appendix C, page 2-11 and 2-12 of the 2003 Final EA, the potential for geology and soils impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to have no impact. Because the currently proposed project consists of a single refinery's activities to comply with Rule 1105.1, geology and soils impacts from the Ultramar Refinery Rule 1105.1 Compliance Project are within the scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1.

The City of Los Angeles is located within a seismically active region. The most significant potential geologic hazard at the Refinery is seismic shaking from future earthquakes generated by active or potentially active faults in the region. Seismic records have been available for the last 200 years, with improved instrumental seismic records available for the past 50 years. Based on review of earthquake data, most of the earthquake epicenters occur along the San Andreas, San Jacinto, Whittier-Elsinore and Newport-Inglewood faults (Jones and Hauksson, 1986). All these faults are elements of the San Andreas fault system. Past experience indicates that there has not been any substantial damage, structural or otherwise to the Refinery as a result of earthquakes. However, faults in the area are potential sources of strong ground shaking, including the following: 1) the San Andreas fault; 2) the Newport-Inglewood fault; 3) the Malibu-Santa Monica-Raymond Hills fault; 4) the Palos Verdes fault; 5) the Whittier-Elsinore

fault; 6) the Sierra Madre fault; 7) the San Fernando fault; 8) the Elysian Park fault; and 9) the Torrance-Wilmington fault.

In addition to the known surface faults, shallow-dipping concealed “blind” thrust faults have been postulated to underlie portions of the Los Angeles Basin. Because there exist few data to define the potential extent of rupture planes associated with these concealed thrust faults, the maximum earthquake that they might generate is largely unknown.

No faults or fault-related features are known to exist at the project site. The site is not located in any Alquist-Priolo Earthquake fault zone and is not expected to be subject to significant surface fault displacement.

Based on the historical record, it is highly probable that earthquakes will affect the Los Angeles region in the future. Research shows that damaging earthquakes will occur on or near recognized faults which show evidence of recent geologic activity. The proximity of major faults to the Refinery increases the probability that an earthquake may adversely affect the Refinery. There is the potential for damage to the new structures in the event of an earthquake. Impacts of an earthquake could include structural failure, spill, etc. The hazards of a release during an earthquake are addressed in the “8.0. Hazards and Hazardous Materials” section below.

New structures must be designed to comply with the Uniform Building Code Zone 4 requirements since the proposed project is located in a seismically active area. The City of Los Angeles is responsible for assuring that the proposed project complies with the Uniform Building Code as part of the issuance of the building permits and can conduct inspections to ensure compliance. The Uniform Building Code is considered to be a standard safeguard against major structural failures and loss of life. The goal of the code is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage, but with some non-structural damage; and (3) resist major earthquakes without collapse, but with some structural and non-structural damage. The Uniform Building Code bases seismic design on minimum lateral seismic forces (“ground shaking”). The Uniform Building Code requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from collapse and failure during earthquakes. The basic formulas used for the Uniform Building Code seismic design require determination of the seismic zone and site coefficient, which represent the foundation conditions at the site.

The Refinery will be required to obtain building permits, as applicable, for all new structures at the site. The Refinery shall submit building plans to the City of Los Angeles for review. The Refinery must receive approval of all building plans and building permits to assure compliance with the latest Building Code adopted by the City prior to commencing construction activities. The issuance of building permits from the local agency will assure compliance with the Uniform Building Code requirements, which include requirements for building within seismic hazard zones. No significant impacts from seismic hazards are expected since the project will be required to comply with the Uniform Building Codes.

**7. b)** As discussed in Appendix C, on Page 2-12 of the 2003 Final EA, since add-on controls will likely be installed at existing refineries, during construction of the proposed project, the possibility exists for temporary erosion resulting from excavating and grading activities, however, these activities are expected to be limited to about 0.05 acre at the Ultramar Refinery. These activities are expected to be minor since the proposed project will occur within already developed facilities in areas with generally flat topography. The proposed project involves the addition of new emission control equipment to existing facilities so major grading/trenching is not expected to be required and is expected to be limited to minor foundation work. Compliance with SCAQMD Rule 403 – Fugitive Dust, will further minimize the potential for dust erosion during construction. No unstable earth conditions or changes in geologic substructures are expected to result from the proposed project.

Relative to operation, no change in surface runoff is expected because surface conditions will remain relatively unchanged. Further, surface runoff is minimized because surface runoff at all facilities is typically captured, treated, and released to the public sewerage system or storm drain system.

**7. c)** As discussed in Appendix C, on Page 2-12 of the 2003 Final EA, since Rule 1105.1 will affect existing facilities, it is expected that the soil types present at the affected facilities will not be further susceptible to expansion. Soil liquefaction can accompany strong earth movement caused by earthquakes. Liquefaction would most likely occur in unconsolidated granular sediments that are water saturated less than 30 feet below ground surface (Tinsley et al., 1985). The pore water pressure can increase in certain soils during extended periods of ground shaking which can change the soil from a solid to liquid state. Structures that are built on soils subject to liquefaction can sink during an earthquake and be damaged since the soils cannot support their weight.

The California Division of Mines and Geology has prepared seismic hazard map zones for areas in California as required by the Seismic Hazards Mapping Act (Public Resources Code Sections 2690-2699.6). The Ultramar Refinery is located in the Long Beach Quadrangle and the area has been mapped for seismic hazards by the Division of Mines and Geology. The Hazard Map for the area indicates that the Refinery is located within an area where there has been historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements in the event of an earthquake (California Division of Mines and Geology, Map of Seismic Hazard Zones, Long Beach Quadrangle, March 25, 1999). The issuance of building permits from the local agency will assure compliance with the Uniform Building Code requirements, which include requirements for building within potential liquefaction zones. No significant impacts from liquefaction are expected since the project will be required to comply with the Uniform Building Codes.

The proposed project site is not subject to landslide or mudflow since the site is flat. No other unique geological resources have been identified at the Refinery.

**7. d and e)** As discussed in Appendix C, on Page 2-12 of the 2003 Final EA, since the proposed project will affect existing refineries located in heavy industrial zones, it is expected that people or property will not be exposed to expansive soils or soils incapable of supporting water disposal.



Further, typically each affected Refinery has existing wastewater treatment systems that will continue to be used as part of the proposed project.

No expansive soils as defined in Table 18-1-B of the Uniform Building Code are present in the proposed project site. Therefore, the proposed project will not create substantial risk to life or property as a result of expansive soils.

The Refinery discharges wastewater to the local sewer system under an Industrial Wastewater Discharge Permit. Neither the Refinery nor the proposed project will use septic tanks or alternative wastewater disposal systems, therefore, no significant impacts on soils from alternative wastewater disposal systems are expected.

### 7.3 Conclusion

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to geology and soils are expected to occur as a result of construction and operational activities that refinery operators would undertake in order to comply with Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to geology and soils. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase to previously analyzed impacts or new impacts that would result in an overall significant adverse impact on geology and soils. Since no significant geology and soils impacts were identified, no mitigation is required or proposed.

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	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>8.0 HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project:			
a) Create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- |    |   |                          |                                     |                                     |
|----|---|--------------------------|-------------------------------------|-------------------------------------|
| d) | Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e) | For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) | For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g) | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| h) | Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| i) | Significantly increase fire hazard in areas with flammable materials?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
- 

## **8.1 Significance Criteria**

The impacts associated with hazards will be considered significant if any of the following occur:

Non-compliance with any applicable design code or regulation.

Non-conformance to National Fire Protection Association standards.

Non-conformance to regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.

Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG-2) levels.

## **8.2 Environmental Setting and Impacts**

**8. a) and b)** As discussed in the 2003 Final EA, on pages 4-13 through 4-17, the potential for hazards and hazardous material impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to be less than significant. Because the currently proposed project consists of a single refinery's activities to comply with Rule 1105.1, hazards and hazardous materials impacts from the Ultramar Refinery Rule 1105.1 Compliance Project are within the scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1.

### **General Hazards**

The Refinery uses a number of hazardous materials at the site to manufacture petroleum products. The major types of public safety risks consist of impacts from toxic substance releases, fires, and explosions. Toxic substances handled by the Refinery include hydrogen sulfide, ammonia, regulated flammables like propane and butane, and petroleum products like gasoline, fuel oils, and diesel. Shipping, handling, storing, and disposing of hazardous materials inherently poses a certain risk of a release to the environment.

The Ultramar Refinery Rule 1105.1 Compliance Project will occur within the confines of the existing Refinery. The currently designed proposed project is not expected to create any additional hazards at the Refinery, as analyzed in the 2003 Final EA. Anhydrous ammonia is injected as needed to condition the PM upstream of the existing ESPs for optimal reduction efficiency. Should it be found that ammonia is necessary (that is, the PM emission limits are not sufficiently reduced), the Refinery would continue to use anhydrous ammonia injected into the system. This would assure that any hazard impacts would be kept at a minimum, since the current system is adequate to supply the new ESP. There will be no new piping or no increase in ammonia storage at the Refinery and, therefore, no incremental increase in the potential exposure or impacts from an accidental release from the existing ammonia storage tanks. The existing emission control system was designed to use anhydrous ammonia and the use of aqueous ammonia is not currently possible. Accordingly, the proposed project will not change the hazards associated with the storage of ammonia at the Refinery as no new ammonia storage will be required. The new ESP that will be installed to comply with Rule 1105.1 is designed to reduce PM emissions below the rule limits without the use of ammonia.

In addition, hazardous materials and hazardous wastes from the existing refineries are currently managed in accordance with applicable federal, state, and local rules and regulations and, thus, no change to the management practices is expected as a result of the Ultramar Refinery Rule 1105.1 Compliance Project. Therefore, no significant adverse hazard impacts are expected from the proposed project.

### **Transportation Release Scenario**

The number of truck trips transporting ESP catalyst fines to cement manufacturers is expected to decrease despite an increase in the amount of catalyst fines collected after the installation of the new ESP. Currently, the ESP hoppers are not heated, allowing the fines to cool and attract atmospheric moisture. Additional water is used to create a slurry capable of flowing the catalyst

finer into transport trucks. The new ESP hoppers will be heated to keep the fines dry, eliminating the need for water, thus, reducing the volume of material transported off-site. The collected catalyst fines will continue to be handled in the same manner as currently handled and will be disposed or recycled at approved facilities.

Because it is not expected that ammonia will be injected in the new ESP to maintain Rule 1105.1 compliance, additional transport and handling is not expected to increase at the Refinery. However, in the unexpected event that ammonia is injected on a continuous basis for Rule 1105.1 compliance, a “worst-case” estimate is that anhydrous ammonia delivery trips could increase by about one truck trip per year. As a result, this would slightly increase the probability of an accident. Despite this, the maximum quantity of ammonia transported to and stored at the Refinery at any one time would not be increased and, therefore, the magnitude and potential consequences of a release involving ammonia would not change from the existing conditions.

Ultramar currently uses about 128 tons per year of anhydrous ammonia (which generates about 10 truck trips per year) to condition the emissions from the FCCU prior to the ESP. As discussed above, the proposed project on a worst-case basis could increase the number of ammonia truck trips by one truck per year. Regulations for the transport of hazardous materials by public highway are described in 49 Code of Federal Regulations 173 and 177. Anhydrous ammonia is currently delivered to the Refinery so the proposed project would not introduce any new hazards.

The accident rates developed based on transport in California were used to predict the accident rate associated with trucks transporting ammonia to the facility. The Refinery currently receives about 10 trucks per year of anhydrous ammonia. Assuming an average truck accident rate of 0.28 accidents per million miles traveled (Los Angeles County, 1988), the estimated existing accident rate associated with the transport of anhydrous ammonia is 0.00014, or about one accident every 7,142 years.

On a “worst-case” basis, the proposed project is expected to increase the amount of ammonia delivered to the Refinery so that a maximum of 11 trucks per year are expected (as compared to the baseline of 10 trucks per year). Assuming an average truck accident rate of 0.28 accidents per million miles traveled (Los Angeles County, 1988), the estimated accident rate associated with the increase in the transport of anhydrous ammonia is 0.000154, or about one accident every 6,493 years. Therefore, the proposed project would increase the probability of an accident (from one accident every 7,142 years to one accident every 6,493 years). [The incremental increase in hazard impacts associated with the proposed project would be one truck per year, for an estimated accident rate of 0.000014 or about one accident every 71,428 years.] The maximum quantity of anhydrous ammonia transported to and stored at the Refinery at any one time would not be increased; therefore, the magnitude and potential consequences of a release involving anhydrous ammonia would not change from the existing conditions. Therefore, no significant adverse hazard impacts are expected from the proposed project.

The actual occurrence of an accidental release of a hazardous material cannot be predicted. The location of an accident or whether sensitive populations would be present in the immediate vicinity also cannot be identified. In general, the shortest and most direct route that takes the least amount of time would have the least risk of an accident. Hazardous material transporters

do not routinely avoid populated areas along their routes, although they generally use approved truck routes that take population densities and sensitive populations into account.

Based on the low probability of an ammonia tanker truck accident with a major release, its potential severity if it did occur, the conclusion of this analysis is that potential impacts due to accidental release of ammonia during transportation are less than significant.

**8. c)** As discussed in the 2003 Final EA, beginning on page 4-13, none of the affected refineries are located within one-quarter mile of an existing or proposed school. The Ultramar Refinery is not located within a one-quarter mile of an existing or proposed school site. The potential impacts of the proposed project on schools is expected to be less than significant.

**8. d)** As discussed in the 2003 Final EA, beginning on page 4-13, significant hazard impacts from the disposal/recycling of hazardous materials are not expected. The proposed project will be constructed within the confines of the existing Ultramar Refinery. In 1985, the Regional Water Quality Control Board (RWQCB) adopted Order 85-17 requiring the Ultramar Refinery (and other local refineries and terminals) to conduct subsurface investigations of soil and ground water. CEQA Section 21092.6 requires the lead agency to consult the lists compiled pursuant to Section 65962.5 of the Government Code to determine whether the project and any alternatives are located on a site which is included on such list. The Refinery is included on a list compiled by the California Environmental Protection Agency (CalEPA) and dated May 6, 1999. The Refinery is listed on the May 6, 1999 list because it is on a list of Cleanup and Abatement Orders prepared by the State Water Resources Control Board (Order No. 97-118). For sites which are listed pursuant to Government Code Section 65962.5, the following information is requested:

Applicant:	Ultramar Refinery
Address:	2402 Anaheim Street, Wilmington, California 90744
Phone:	(562) 491-6877
Address of Site:	2402 Anaheim Street, Wilmington, California 90744
Local Agency:	Wilmington, City of Los Angeles
Assessor's Book:	7440-2-20,22
List:	See above.
Regulatory ID No:	4B192023NO6
Date of List:	See above.

The proposed project is not expected to adversely affect the Ultramar Refinery's Cleanup and Abatement Order. The Order will remain in effect and continue to establish requirements for site monitoring and clean up of existing contamination.

Currently, there is no evidence that soil contamination is located within the areas proposed for grading, trenching or excavation. Construction activities could uncover contaminated soils, given the heavily industrialized nature of the Refinery and the fact that refining activities, petroleum storage, and distribution have been conducted at the site for a number of years.

Excavated soils that contain concentrations of certain substances, including heavy metals and hydrocarbons, generally are regulated under California hazardous waste regulations. Any

required soil remediation will be handled under the approved SCAQMD Rule 1166 plan by using an organic vapor analyzer and visual inspection for detection of VOC and other hydrocarbons. Soil which demonstrates a VOC reading in excess of 50 ppm or greater at a distance of up to three inches from the surface or which otherwise appears contaminated will be segregated and stockpiled for further analysis. Soils will then be managed in accordance with Ultramar's Los Angeles Regional Water Quality Control Board interim waste discharge permit for soil management in connection with excavation (File No. 88-57-270(93)) including requirements for soil testing, monitoring, and reporting. Soils, which exceed the standards specified in the permit, will be segregated and managed as contaminated soil with treatment or disposal managed in accordance with state hazardous waste regulations. No significant impacts are expected from the construction-related potential for encountering contaminated soils during excavation since there are numerous local, state (Title 22 of the California Code of Regulations) and federal rules which regulate the handling, transportation, and ultimate disposition of contaminated soils, including SCAQMD Rule 1166. Title 22 of the California Code of Regulations establishes many requirements for hazardous waste handling, transport and disposal, including requirements to use approved disposal/treatment facilities, use certified hazardous waste transporters, and use manifests to track hazardous materials, among many other requirements. Contaminated soil found during previous construction activities has generally not been considered hazardous waste. Soil sampling will be conducted in the event excavation is necessary and the Refinery will comply with all applicable rules and regulations.

**8. e) and f)** As discussed in the 2003 Final EA, beginning on page 4-13, the proposed project will be constructed within the confines of the existing Refinery. The proposed project site is not located within an airport land use plan or within two miles of a public or private use airport. Therefore, no safety hazards are expected from the proposed project on any airport.

**8. g)** As discussed in the 2003 Final EA, beginning on page 4-13, the proposed project is not expected to interfere with an emergency response plan or emergency evacuation plan. The proposed project will result in modifications to the existing Refinery. All construction activities will occur within the confines of the existing Refinery so that no emergency response plans at other facilities should be affected. The Refinery has implemented emergency response plans at its facility, but no substantial modifications to the plans are expected as a result of the proposed project. The proposed project is not expected to alter the route that employees would take to evacuate the site, as the evacuation routes generally directs employees outside of the main operating portions of the Refinery.

**8. h and i)** As discussed in the 2003 Final EA, beginning on page 4-13, the proposed project will not increase the existing risk of fire hazards in areas with flammable brush, grass, or trees. The proposed project will not increase the existing risk of fire hazards in areas with flammable brush, grass, or trees. The proposed project does not expose people or structures to wildland fires. Further, the proposed project is not located in an area where residents are intermixed with wildlands. No substantial or native vegetation exists within the operational portions of the Refinery. Further, no increase in the storage of flammable materials at the Refinery is expected. Therefore, no significant increase in fire hazards are expected at the Refinery associated with the proposed project.

Based on the above considerations, the potential hazards and hazardous materials impacts related to the operations at the Ultramar Refinery, and the transport of hazardous materials associated with the Ultramar Refinery Rule 1105.1 Compliance Project are less than significant.

### 8.3 Conclusion

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to hazards and hazardous materials are expected to occur as a result of construction and operational activities that refinery operators would undertake in order to comply with Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to hazards and hazardous materials. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase to previously analyzed impacts or new impacts that would result in an overall significant adverse impact on hazards and hazardous materials. Since no significant adverse hazard/hazardous materials impacts were identified, no mitigation is required or proposed.

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	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>9.0 HYDROLOGY AND WATER QUALITY.</b>			
Would the project:			
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?

- |    |   |                          |                                     |                                     |
|----|---|--------------------------|-------------------------------------|-------------------------------------|
| e) | Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?                 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| f) | Otherwise substantially degrade water quality?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g) | Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?                                   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| h) | Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| i) | Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?                                     | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| j) | Inundation by seiche, tsunami, or mudflow?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| k) | Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| l) | Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| m) | Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?          | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
-



- |    |   |                          |                          |                                     |
|----|---|--------------------------|--------------------------|-------------------------------------|
| n) | Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| o) | Require in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
- 

## 9.1 Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

### **Water Quality:**

The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.

The project will cause the degradation of surface water substantially affecting current or future uses.

The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.

The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.

The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.

The project results in alterations to the course or flow of floodwaters.

### **Water Demand:**

The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use a substantial amount of potable water.

The project increases demand for water by more than five million gallons per day.

## **9.2 Environmental Setting and Impacts**

### **9. a), k), l), and o) Wastewater Generation**

As discussed in Appendix C, page 2-17 of the 2003 Final EA, the potential for hydrology and water quality impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to be less than significant. Because the currently proposed project consists of a single refinery's activities to comply with Rule 1105.1, hydrology and water quality impacts from the Ultramar Refinery Rule 1105.1 Compliance Project are within the scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1.

The Ultramar Refinery Rule 1105.1 Compliance Project at the Refinery includes the construction of one new ESP downstream of the two existing parallel ESPs. Water will be used during grading activities to minimize dust emissions; however, the amount of grading required is minimal (0.05 acre) since the area for the locations of the new foundations is already flat. Therefore, no substantial use of water is required during the construction phase.

No increase in water use is expected during the operational phase due to the proposed project since the operation of dry ESPs does not use water. Therefore, no increase in water use is required as part of the proposed project. The proposed project will not violated any water quality standards, increase wastewater discharge, exceed wastewater treatment requirements, require the construction of new water or wastewater treatment facilities or require a determination by the wastewater treatment provider that it has adequate capacity.

### **9. b) Ground Water Quality**

As discussed in Appendix C, on Page 2-17 of the 2003 Final EA, the proposed project is not expected to significantly adversely affect the quantity or quality of groundwater in the area of the Refinery.

There is no beneficial use of ground water in the area of the Ultramar Refinery since most of the aquifers are unusable for fresh water supply because of salt-water intrusion. A small amount of water will be used for dust suppression during grading activities, but this amount would not exceed the SCAQMD's water demand significance threshold of five million gallons per day or more. However, since dry ESP technology does not utilize water, no increase in water use is expected during operations associated with the proposed project. Therefore, no significant adverse impacts are expected to ground water quality from the Ultramar Refinery Rule 1105.1 Compliance Project.

### **9. c), d), e), f) and m) Surface Water**

As discussed in Appendix C, on Page 2-18 of the 2003 Final EA, changes to the Refinery's storm water collection systems are expected to be less than significant since most of the changes will occur within existing units. The Ultramar Refinery is located immediately east of the Dominguez Channel, less than one-half mile north of the Cerritos Channel, and approximately 1.3 miles west of the Los Angeles River. The Los Angeles River and the Dominguez Channel are the major drainages that flow into the Los Angeles-Long Beach Harbor complex. Sediments

and contaminants are transported into the harbor with the flows from the Los Angeles River and, to a lesser degree, the Dominguez Channel.

At the Ultramar Refinery, storm water runoff within process unit areas are handled by the Refinery's wastewater system and sent to an on-site wastewater treatment system prior to discharge to the Los Angeles County Sanitation Districts' system. Storm water runoff from outside the process unit areas will be collected and managed subject to the Refinery's Stormwater Pollution Prevention Plan, and discharged through the Port of Long Beach storm water system. The proposed project is not expected to result in an increase in storm water runoff, or affect drainage, therefore, no significant adverse impacts on storm water runoff is expected.

#### **9. g), h), and i) Flooding**

As discussed in Appendix C, on Page 2-18 of the 2003 Final EA, the proposed project is expected to involve construction and modification activities located within existing refineries and does not include the construction of any new housing nor would it place new housing within a 100-year flood hazard area. The Refinery is not located within a 100-year flood hazard area so the proposed project would not impede or redirect 100-year flood flows. The project is not located within a flood zone and would not expose people or property to any known flood-related hazards.

#### **9. j) Other Hazards**

As discussed in Appendix C, on Page 2-18 of the 2003 Final EA, the affected refineries are generally located near the Ports of Long Beach and Los Angeles, but at a sufficient distance from the shore to avoid potential tsunami impacts. There are no open ponds at the site so that the potential for seiching is considered to be less than significant. The proposed project site is located near the Los Angeles/Long Beach Harbor which has breakwaters constructed to protect the port areas so the potential for a tsunami to adversely affect the Refinery site is considered less than significant. The proposed project site is located in a flat area with no hills or mountains nearby so the potential for significant impacts from mudflows is considered less than significant.

#### **9. n) Water Demand**

As discussed in Appendix C, on Page 2-18 of the 2003 Final EA, the refineries are expected to have sufficient water supplies available for Rule 1105.1 compliance projects. The Ultramar Refinery Rule 1105.1 Compliance Project is not expected to result in a substantial increase in water use. A small amount of water will be used for dust suppression during grading activities, but this amount would not exceed the SCAQMD's water demand significance threshold of five million gallons per day or more. Since dry ESPs do not utilize water, no increase in water use would be expected for the operation of the dry ESPs. No significant adverse impact on water use is expected due to the proposed project.

Based on the above considerations, the potential hydrology and water quality impacts, especially those associated with wastewater discharge, storm water discharge, and water demand are expected to be less than significant for the proposed project.

### 9.3 Conclusion

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to hydrology and water quality are expected to occur as a result of construction and operational activities that refinery operators would undertake in order to comply with Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to hydrology and water quality. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase to previously analyzed or new impacts that would result in an overall significant adverse impact on hydrology and water quality. Since no significant hydrology and water quality impacts were identified, no mitigation is required or proposed.

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	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>10.0 LAND USE AND PLANNING.</b>			
Would the project:			
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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### 10.1 Significance Criteria

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by the City of Los Angeles.

### 10.2 Environmental Setting and Impacts

**10. a)** As discussed in Appendix C, page 2-19 of the 2003 Final EA, the potential for land use and planning impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to be less than significant. Because the currently proposed project consists of a single refinery's activities to comply with Rule 1105.1, land use and planning impacts from the Ultramar Refinery Rule 1105.1 Compliance Project are within the

scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1. The proposed project will occur entirely within the boundaries of the existing Ultramar Refinery, thus, it will not result in physically dividing any established communities, but will continue the use of the site as a Refinery.

**10. b) and c)** As discussed in Appendix C, on Page 2-19 of the 2003 Final EA, land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by regulating emissions of PM10 and ammonia slip from FCCUs. The Refinery is located in the Wilmington District of the City of Los Angeles within southern Los Angeles County. The community of Wilmington is generally urbanized and includes a substantial amount of industrial and port-related development. The Ports of Los Angeles and Long Beach are located along the coastal boundary of Wilmington.

The Wilmington area is bordered by the Harbor Freeway (Interstate 110) on the west, the Long Beach Freeway (Interstate 710) on the east, the San Diego Freeway (Interstate 405) on the north and the Pacific Ocean on the south. The Dominguez Channel runs adjacent to the Refinery from the north to the south. Railroad tracks service the area along the western boundary of the Refinery and along Alameda Street.

The project would be consistent with the zoning for the Refinery (M3-1) and with the Wilmington-Harbor City Plan (City of Los Angeles, 1993). All proposed modifications would occur within the confines of the existing Refinery.

The Ultramar Refinery is located within the California Coastal Zone and regulated by the California Coastal Commission. The proposed modifications at the Refinery are expected to require the issuance of either a Coastal Development Permit or a de minimus waiver to assure that the project will comply with the coastal protection requirements of the California Coastal Act. The California Coastal Commission in the past has reviewed development at the Ultramar Refinery and has issued 15 coastal development permits and 13 de minimus waivers (minor development projects which did not require a Coastal Development Permit). For each Coastal Development Permit at the Refinery, the Commission found the proposed Refinery development to be consistent with the goals and policies of the California Coastal Act. The development in the proposed project is similar to the development that the California Coastal Commission has approved in previous permit actions. The proposed Refinery development will not impede or otherwise adversely impact recreation or other coastal uses. The heavily industrial character of the general area and the extensive port development has eliminated or greatly reduced most traditional coastal recreation opportunities in the vicinity of the Refinery. Therefore, the proposed project is consistent with the goals and policies of the California Coastal Act and is not expected to have significant adverse impacts on coastal resources.

Based on the above, the proposed project would not conflict with any land use plan policy, or regulation adopted to avoid or mitigate an environmental effect, or conflict with a habitat or natural community conservation plan.

### 10.3 Conclusion

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to land use and planning are expected to occur as a result of construction and operational activities that refinery operators would undertake in order to comply with Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to land use and planning. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase to previously analyzed impacts or new impacts that would result in an overall significant adverse impact on land use and planning. Since no significant land use and planning impacts were identified, no mitigation is required or proposed.

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	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>11.0 MINERAL RESOURCES.</b> Would the project:			
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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### 11.1 Significance Criteria

Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

The proposed project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan

## 11.2 Environmental Setting and Impacts

**11. a), and b)** As discussed in Appendix C, page 2-20 of the 2003 Final EA, the potential for mineral resources impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to be less than significant. All construction and operational activities that would occur as a result of the proposed project at the Ultramar Refinery will occur within the confines of the existing Refinery. The proposed project would be consistent with the heavy industrial zoning for the Refinery. The only significant resource in the vicinity of the Refinery is the production of oil from the Wilmington field. While much of the operation for this field has been decommissioned, limited production facilities remain in the vicinity of the Refinery. None of these production facilities will be affected by the proposed project in any way so no significant adverse impacts are expected. There are no provisions of the proposed project that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state such as aggregate, coal, clay, shale, et cetera, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Based upon the above considerations, significant mineral resources impacts are not expected from the Ultramar Refinery Rule 1105.1 Compliance Project.

## 11.3 Conclusion

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to mineral resources are expected to occur as a result of construction and operational activities that Refinery operators would undertake in order to comply with Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to mineral resources. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase in previously analyzed impacts or new impacts that would result in an overall significant adverse impact on mineral resources. Since no significant mineral resources impacts were identified, no mitigation is required or proposed.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>12.0 NOISE.</b> Would the project result in:			
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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## **12.1 Significance Criteria**

Impacts on noise will be considered significant if:

Construction noise levels exceed the City of Los Angeles noise ordinance or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.

The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

## **12.2 Environmental Setting and Impacts**

**12. a), b), c), and d)** As discussed in Appendix C, page 2-21 of the 2003 Final EA, the potential for noise impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to be less than significant. Because the currently proposed project consists of a single refinery's activities to comply with Rule 1105.1, noise impacts from



the Ultramar Refinery Rule 1105.1 Compliance Project are within the scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1.

The vicinity of the proposed Refinery project is an urban environment characterized by extensive industrial, commercial and transportation-related land uses. The Refinery is surrounded by industrial facilities, commercial activities and transportation corridors. Major contributors to the ambient noise levels in the general vicinity of the Refinery include the following:

- The local railways which run along the northern and western boundaries of the Refinery;
- Vehicular traffic on the Terminal Island Freeway, Henry Ford Avenue, and Anaheim Street, especially the large number of trucks that use these arterials into and out of the port area;
- The industrial facilities which include the Refinery, a hydrogen plant, a coke calcining facility, cogeneration plant, container facilities, automobile import facilities, other refineries, and automobile wrecking/dismantling operations; and
- The numerous port-related activities such as vessel traffic and loading/unloading of cargo.

Traffic, both vehicular and railroad, is a major source of noise in the area. The Terminal Island Freeway is a major noise source at the site since it is elevated above most structures and buildings; therefore, the noise is not attenuated as quickly as noise generated at ground level. The estimated noise level 50 feet from the Terminal Island Freeway is about 70 dBA. Elevated railroad tracks have also been constructed along the western portion of the Refinery as part of the Alameda Corridor and are a source of noise in the area.

The existing noise environment at the Ultramar Refinery is dominated by existing Refinery equipment, other heavy industrial activities, and traffic. Construction activities for the proposed project are expected to generate noise associated with the use of heavy construction equipment and construction-related traffic. However, noise from the proposed project is not expected to produce noise in excess of current operations. The location of the construction activities will be adjacent to the FCCU and located adjacent to other industrial areas. The closest residents are located approximately one mile to the northwest of the construction site. Therefore, the noise impacts associated with construction activities are expected to be less than significant since sufficient distance exists between the construction noise sources and sensitive receptors for the noise to be completely attenuated.

Noise from the proposed project is not expected to exceed that of current operations at the existing Refinery. The noise produced by ESPs is much less than the existing noise produced by the FCCU. Noise levels in the vicinity of the FCCU are in the range of 70 to 80 decibels. The FCCU is located near the center of the Refinery so that noise levels are dissipated by the time they reach the Refinery property boundaries. The proposed project will result in the construction of one new ESP downstream of two existing parallel ESPs. The noise level of the new equipment is expected to be about the same as other existing equipment, so no change in overall

noise levels at the Refinery is expected during the operation of the proposed project. Further, Occupational Safety and Health Administration (OSHA) and California-OSHA have established noise standards to protect worker health. Noise impacts are expected to be less than significant.

**12. e) and f)** As discussed in Appendix C, on Page 2-21 of the 2003 Final EA, the Ultramar Refinery is not located within an airport land use plan, and the proposed project would not expose people residing or working in the project area to excessive noise levels associated with airplanes.

### **12.3 Conclusion**

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to noise are expected to occur as a result of construction and operational activities that refinery operators would undertake in order to comply with Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to noise. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase in previously analyzed impacts or new impacts that would result in an overall significant adverse impact on noise. Since no significant noise impacts were identified, no mitigation is required or proposed.

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	<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>13.0 POPULATION AND HOUSING.</b>			
Would the project:			
a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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### **13.1 Significance Criteria**

The impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

The demand for temporary or permanent housing exceeds the existing supply.

The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

### **13.2 Environmental Setting and Impacts**

**13. a)** As discussed in Appendix C, page 2-22 of the 2003 Final EA, the potential for population and housing impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to be less than significant. Because the currently proposed project consists of a single refinery's activities to comply with Rule 1105.1, population and housing impacts from the Ultramar Refinery Rule 1105.1 Compliance Project are within the scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1.

Construction and operations activities associated with the proposed project are not expected to involve the relocation of individuals, impact housing or commercial facilities, or change the distribution of the population because the proposed project will occur completely within existing industrial facilities. A maximum of 85 workers will be required during the construction phase of the proposed project and most of the workers are expected to come from the large labor pool in southern California. No increase in the permanent number of workers at the Refinery is expected following the construction phase because the primary effect of the proposed project is to install one new ESP downstream of the two existing parallel ESPs and no increase in workers is required to operate the additional equipment.

**13. b) and c)** As discussed in Appendix C, on Page 2-22 of the 2003 Final EA, because the proposed project includes modifications and/or changes at existing refineries in industrial settings, the Ultramar Refinery Rule 1105.1 Compliance Project is not expected to result in the creation of any industry that would affect population growth, directly or indirectly induce the construction of single- or multiple-family units, or require the displacement of people or housing elsewhere in the district. Since the proposed project will occur at an existing industrial facility, displacement of housing of any type is not anticipated. Therefore, construction and operation of the proposed project is not expected to have a significant adverse impact on population, population distribution, or housing.

### **13.3 Conclusion**

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to population and housing are expected to occur as a result of construction and operational activities that refinery operators would undertake in order to comply with Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to population and housing. Based

upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase in previously analyzed impacts or new impacts that would result in an overall significant adverse impact on population and housing. Since no significant population and housing impacts were identified, no mitigation is required or proposed.

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	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>14.0. PUBLIC SERVICES.</b> Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:			
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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#### 14.1 Significance Criteria

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

#### 14.2 Environmental Setting and Impacts

##### 14. a) Fire and Police Protection

**14. a) and b)** As discussed in Appendix C, page 2-23 of the 2003 Final EA, the potential for public services impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to be less than significant. Because the currently proposed project consists of a single refinery's activities to comply with Rule 1105.1, public services impacts from the Ultramar Refinery Rule 1105.1 Compliance Project are within the scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1.

The Ultramar Refinery receives police and fire protection services from the City of Los Angeles. Construction and operational activities are not expected to result in an increased need for fire response services. Construction and operational activities include safeguards, monitoring for hazards with equipment designed to detect sources of flammable gases and vapors, written procedures, training, and authorization of equipment used on-site.

Compliance with state and local fire codes is expected to minimize the need for additional fire protection services. The Refinery is served by its own emergency response team along with local fire department and other emergency services. Fire-fighting and emergency response personnel and equipment will continue to be maintained and operated at the Refinery. Existing fire protection at the Refinery includes two foam trailers with a foam portioning pump; three hired gun monitors which consist of nozzles that can deliver 2,000 gpm of water or foam; tank trucks with foam carrying capabilities; two 50-gallon foam hose reel stations within each Refinery unit, each capable of delivering 110 gpm; deluge systems within Refinery Units and over hydrocarbon pumps; on-site fire water hydrants; dry chemical extinguishers; fixed firewater monitors within process units each capable of delivering a minimum of 500 gpm; and portable fire monitors within each unit to quickly establish water flow. The on-site foam-making capability at the Refinery is about 6,000 to 7,000 gallons.

In addition, Ultramar maintains an on-site Emergency Response Team composed of 20-25 personnel per shift with fire-fighting experience. Members of the team receive hands-on fire training on a quarterly basis. Close coordination with local fire departments and emergency services will also continue and no new fire protection resources would be needed.

The City of Los Angeles Police Department is the responding agency for law enforcement needs in the vicinity of the proposed project. The project site is located within the jurisdiction of the Los Angeles Police Department's Harbor Division. The Harbor Division Station, located at 2175 John Gibson Boulevard in San Pedro, is approximately four miles from the project site. The station has six to twelve units available for response, depending on the time of day. Because police units are in the field, response times vary depending on the location of the nearest unit.

Construction and operational activities within the confines of the Ultramar Refinery will be monitored by the existing security force stationed at the Refinery 24 hours a day, seven days a week. The security force includes five guards during the day (two at each of the two entrances and one roving guard) and two guards at night (one at the one entrance opened at night and one roving guard). The Refinery is fenced and a 24-hour security force will continue to be maintained. Entry and exit of the construction work force will be monitored and no additional or altered police protection is expected to be required due to the proposed project.

#### **14. c, d) and e) Schools, Parks and Other Public Facilities**

As discussed in Appendix C, on Page 2-23 of the 2003 Final EA, the local labor pool (e.g., workforce) is expected to be adequate to fill the short-term construction positions for the proposed project. The Ultramar Refinery Rule 1105.1 Compliance Project will require a maximum of about 85 construction workers. These workers are expected to come primarily from the labor pool in southern California. The proposed project will not result in additional

permanent workers at the facility or increase the local population, as no new workers are required to operate the new ESP. Thus, no impacts are expected to local schools, parks, other public facilities or government services.

Based upon these considerations, significant public services impacts are not expected from the implementation of the Ultramar Refinery Rule 1105.1 Compliance Project.

### **14.3 Conclusion**

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to public services are expected to occur as a result of construction and operational activities that refinery operators would undertake in order to comply with Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to public services. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase in previously analyzed impacts or new impacts that would result in an overall significant adverse impact on public services. Since no significant public services impacts were identified, no mitigation is required or proposed.

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	<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>15.0 RECREATION</b>			
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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## **15.1 Significance Criteria**

The impacts to recreation will be considered significant if:

The project results in an increased demand for neighborhood or regional parks or other recreational facilities.

The project adversely affects existing recreational opportunities.

## **15.2 Environmental Setting and Impacts**

**15. a) and b)** As discussed in Appendix C, page 2-24 of the 2003 Final EA, the potential for recreation impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to be less than significant. Because the currently proposed project consists of a single refinery's activities to comply with Rule 1105.1, recreation impacts from the Ultramar Refinery Rule 1105.1 Compliance Project are within the scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1.

The Ultramar Refinery Rule 1105.1 Compliance Project will require a maximum of about 85 construction workers. These workers are expected to come from the large labor pool in southern California. The proposed project will not result in additional permanent workers at the facility or increase the local population. Due to the heavy industrialization of the area, there are no recreational opportunities of significance at or in the immediate vicinity of the Refinery. Thus, no impacts are expected to recreational facilities and the proposed project would not require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

## **15.3 Conclusion**

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to recreation are expected to occur as a result of construction and operational activities that refinery operators would undertake in order to comply with Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to recreation. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase in previously analyzed impacts or new impacts that would result in an overall significant adverse impact on recreation. Since no significant recreation impacts were identified, no mitigation is required or proposed.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>16.0. SOLID/HAZARDOUS WASTE.</b> Would the project:			
a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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### 16.1 Significance Criteria

The proposed project impacts on solid and hazardous waste will be considered significant if the following occur:

The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

### 16.2 Environmental Setting and Impacts

**16. a) Construction Activities:** As discussed in Appendix C, page 2-25 of the 2003 Final EA, the potential for solid/hazardous waste impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to be less than significant. Because the currently proposed project consists of a single refinery's activities to comply with Rule 1105.1, solid/hazardous waste impacts from the Ultramar Refinery Rule 1105.1 Compliance Project are within the scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1.

No major demolition activities (i.e., dismantle and relocate minor existing wastewater equipment and relocate the existing regenerator flue gas stack) are expected as part of the proposed project so no increase in the generation of hazardous/solid waste is expected during the construction period. The existing regenerator flue gas stack will be removed and replaced with a new stack. The old stack is expected to be shipped off for recycling due to its metal content. Therefore, no significant adverse impacts are expected to the existing landfill capacity due to construction of the proposed project. The preparation of the site and construction related to the revised proposed project has the potential to generate hazardous materials and wastes, however, minimal grading is required for the proposed project (approximately 0.05 acre). If hazardous materials were encountered during construction activities, it would be treated on-site or disposed of off-site at an approved facility. Options available for off-site disposal include non-hazardous and hazardous



waste landfills. If hydrocarbons are encountered during installation of project-related equipment, they would be recovered and processed in existing Refinery units for conversion into products. Based on the above, the solid and hazardous waste impacts associated with the construction phase of the proposed project are not expected to be significant.

**Project Operation:** Although the new ESP has the capability of using anhydrous ammonia, which could contribute to Rule 1105.1 compliance, ammonia usage is not expected to change and the amount of waste from the ESP hoppers is expected to decrease by about 145 pounds per hour. Currently, the ESPs are not heated, allowing catalyst fines to cool and attract atmospheric moisture. Additional water must be used to create a catalyst slurry capable of transferring catalyst fines into transport trucks. The new ESP hoppers will be heated to keep the catalyst fines dry, eliminating this problem, and reducing catalyst fines volume. Therefore, operational activities resulting from this proposed project are not expected to generate additional hazardous wastes and are not significant.

**16. b)** As discussed in Appendix C, on Page 2-25 of the 2003 Final EA, it is expected that each affected Refinery currently complies with, and upon completion of the proposed project, is expected to continue to comply with federal, state, and local regulations related to solid and hazardous wastes. The Ultramar Refinery Rule 1105.1 Compliance Project is not expected to adversely affect the ability to comply with federal, state, and local solid/hazardous waste regulations.

### 16.3 Conclusion

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to solid/hazardous waste are expected to occur as a result of construction and operational activities that refinery operators would undertake in order to comply with SCAQMD Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to solid/hazardous waste. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase in previously analyzed impacts or new impacts that would result in an overall significant adverse impact on solid/hazardous waste. Since no significant solid/hazardous waste impacts were identified, no mitigation is required or proposed.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>17.0 TRANSPORTATION/TRAFFIC.</b> Would the project:			
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

- |    |   |                          |                                     |                                     |
|----|---|--------------------------|-------------------------------------|-------------------------------------|
| b) | Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) | Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?      | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) | Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?               | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) | Result in inadequate emergency access ?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) | Result in inadequate parking capacity?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| g) | Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?                                     | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
- 

### **17.1 Significance Criteria**

The impacts on transportation/traffic will be considered significant if any of the following criteria apply:

Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E or F for more than one month.

An intersection's volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.

A major roadway is closed to all through traffic, and no alternate route is available.

There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.

The demand for parking facilities is substantially increased.

Water borne, rail car or air traffic is substantially altered.

Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.

## **17.2 Environmental Setting and Impacts**

**17. a) and b)** As discussed in Appendix C, page 2-26 of the 2003 Final EA, the potential for transportation/traffic impacts associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to be less than significant. Because the currently proposed project consists of a single refinery's activities to comply with Rule 1105.1, transportation/traffic impacts from the Ultramar Refinery Rule 1105.1 Compliance Project are within the scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1.

About 85 construction workers will be commuting to the Refinery and about three delivery trucks per day will be necessary during peak construction activities. All construction workers will be directed to the Refinery for parking since sufficient parking is available at the Refinery. Construction workers are expected to arrive at the work sites between 6:30 – 7:00 a.m. and depart about 3:30 – 4:30 p.m., which would generally avoid peak hour traffic conditions. The construction activities are expected to avoid peak hour traffic during morning hours, between 7-8 a.m., but could impact the evening peak hour (between 4-6 p.m.). Construction activities are expected to be limited to about a 13-month period, with the peak construction period limited to about three months. Therefore, the increase in traffic in the area is temporary and will cease following the completion of construction activities. The predominate route used to reach the Refinery is from the Long Beach Interstate 710 Freeway at Anaheim Street. Anaheim Street is an east-west, six lane divided roadway that carries about 20,000 to 24,000 vehicles per day. (SCAQMD, 2004). The projected increase in traffic during the construction phase of the proposed project is well below a one percent increase in traffic on the local streets and at the local intersections. In comparison, the estimated increase in construction traffic associated with the Ultramar Alkylation Improvement Project was a maximum of 727 cars per day. The level of service (LOS) analysis indicated that an increase in 727 vehicles a day was less than significant (SCAQMD, 2004). Delivery trucks are expected to avoid peak hour traffic to minimize the delivery time. Therefore, the proposed project impacts on traffic during the construction phase of the proposed project are expected to be less than significant.

The permanent work force at the Refinery is not expected to increase as a result of this project and no increase in operation-related traffic is expected. The proposed project is expected to result in a decrease of nine truck trips per year to transport ESP hopper catalyst fines and a maximum increase of one truck trip per year to transport ammonia. Therefore, the proposed project is expected to result in an overall decrease in eight truck trips per year so no significant traffic impacts are expected during the operational phase of the proposed project.

**17. c)** As discussed in Appendix C, on Page 2-26 of the 2003 Final EA, the refining of petroleum products and the specific activity of controlling particulate emissions from FCCUs do not require the transport of materials to or from each Refinery via air traffic. Thus, the proposed project is not expected to result in a change to existing air traffic patterns. The nearest airport is located about 10 miles north of the Ultramar Refinery and the Refinery is outside of the normal

flight pattern of this airport. In addition, the project will not involve the delivery of materials via air so no increase in air traffic is expected.

**17. d) and e)** As discussed in Appendix C, on Page 2-26 of the 2003 Final EA, the siting of the Refinery is consistent with surrounding land uses and traffic/circulation in the surrounding areas of the refineries are designed to accommodate Refinery-related traffic patterns. Thus, the proposed project is not expected to substantially increase traffic hazards or create incompatible uses at or adjacent to the Ultramar Refinery. Aside from the temporary effects due to an increase in traffic during the construction phase, the proposed project is not expected to alter the existing long-term circulation patterns. Emergency access at the Refinery will not be impacted by the proposed project. Further, the Ultramar Refinery will continue to maintain their existing emergency access gates and the Refinery's emergency response plan will not need to be modified.

**17. f)** As discussed in Appendix C, on Page 2-27 of the 2003 Final EA, no significant adverse impacts on parking are expected due to implementation of the 1105.1 compliance projects. The Ultramar Wilmington Refinery has sufficient on-site parking for all construction workers. No additional parking will be needed after completion of the construction phase because no increase in the work force at the Ultramar Refinery is required. Therefore, no significant adverse impact on parking is expected as a result of the proposed project.

**17. g)** As discussed in Appendix C, on Page 2-27 of the 2003 Final EA, construction and operation activities resulting from Rule 1105.1 compliance projects are not expected to conflict with policies supporting alternative transportation since all construction and operation activities related to controlling emissions from FCCUs will occur solely in existing industrial areas. The Ultramar Refinery Rule 1105.1 Compliance Project will occur within the confines of the existing Refinery and the increase in traffic will be minimal and temporary during the construction phase. Following construction, no increase in traffic is expected. The proposed project will be constructed within the confines of an existing Refinery and is not expected to conflict with adopted policies, plans, or programs supporting alternative transportation modes (e.g., bus turnouts, bicycle racks).

Based upon these considerations, significant transportation/traffic impacts are not expected from Ultramar Refinery's Rule 1105.1 Compliance Project.

### **17.3 Conclusion**

The 2003 Final EA for Rule 1105.1 concluded that no significant adverse impacts to transportation/traffic are expected to occur as a result of construction and operational activities that refinery operators would undertake in order to comply with Rule 1105.1. Also, the Ultramar Refinery Rule 1105.1 Compliance Project, a subset of the overall project analyzed in the 2003 Final EA, will not result in any adverse significant impacts to transportation/traffic. Based upon these considerations, neither the project analyzed in the 2003 Final EA for Rule 1105.1, nor the currently proposed Ultramar Refinery Rule 1105.1 Compliance Project will cause a substantial increase in previously analyzed impacts or new impacts that would result in an overall significant

adverse impact on transportation/traffic. Since no significant transportation/traffic impacts were identified, no mitigation is required or proposed.

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	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>18.0 MANDATORY FINDINGS OF SIGNIFICANCE.</b>			
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 18.1 Environmental Setting and Impacts

**18. a)** As discussed in Appendix C, page 2-28 of the 2003 Final EA, the mandatory findings for environmental checklist item 18a) associated with the activities for all five of the affected refineries to comply with Rule 1105.1 was determined to be less than significant. Because the currently proposed project consists of a single refinery's activities to comply with Rule 1105.1, the mandatory findings of significance associated with the Ultramar Refinery Rule 1105.1 Compliance Project are within the scope of the larger project evaluated in the 2003 Final EA for Rule 1105.1.

Similar to the conclusion for all five affected refineries in the 2003 Final EA, the proposed project does not have the potential to adversely affect the environment, reduce or eliminate any plant or animal species or destroy prehistoric records of the past. The proposed project is located

at a site that is part of an existing industrial facility, which has been previously disturbed, graded and developed, and this project will not extend into environmentally sensitive areas but will remain within the confines of an existing, operating Refinery. For additional information, see Section 4.0 – Biological Resources and Section 5.0 – Cultural Resources.

**18. b)** The 2003 Final EA concluded that overlapping construction phases at affected refineries installing new or rebuilding existing ESPs would exceed the significance thresholds for CO, VOC and NO<sub>x</sub> during the construction phase. Even though SCAQMD Rule 1105.1 will cause a temporary and significant adverse increase in emissions during the construction phase, the temporary net increase in emissions combined with the total emission reductions projected overall would not interfere with the air quality progress and attainment demonstration projected in the AQMP.

CEQA Guidelines indicate that cumulative impacts of a project shall be discussed when the project's incremental effect is cumulatively considerable, as defined in CEQA Guidelines §15355. SCAQMD policy defines cumulatively considerable air quality impacts as impacts that exceed project-specific significance thresholds. Indeed, it is for this reason the SCAQMD's air quality significance thresholds apply to both project-specific and cumulative impacts. Since criteria pollutant emissions from the proposed project do not exceed the applicable significance threshold, they are not considered to be cumulatively considerable. As a result, the proposed Ultramar Rule 1105.1 Compliance Project is not expected to create significant adverse project-specific or cumulative air quality impacts during construction emissions (see Section 3d).

Cumulative operational air quality impacts from implementing Rule 1105.1 and all other AQMP control measures considered together, are not expected to be significant because implementation of existing rules with future compliance dates and all AQMP control measures is expected to result in net emission reductions of 0.5 ton per day of solid filterable PM<sub>10</sub>, and about two tons per day of condensable PM<sub>10</sub> by final rule implementation and overall air quality improvement.

The Ultramar Refinery Rule 1105.1 Compliance Project will add a new ESP to the Refinery downstream of the two existing parallel ESPs so that PM<sub>10</sub> from the FCCU will be reduced to levels that will comply with the emission limitations in Rule 1105.1. The sole purpose of the proposed project is to comply with Rule 1105.1, so that overall PM<sub>10</sub> and ammonia emission limits from the FCCU are achieved. Therefore, no significant adverse air quality impacts are expected, either individually or cumulatively.

The Ultramar Refinery Rule 1105.1 Compliance Project will comply with the AQMP. The AQMP identifies control measures necessary to lessen the cumulative air quality problem in the South Coast Air Basin and lead the Basin into compliance with the state and federal ambient air quality standards. The modifications to Rule 1105.1 were specifically identified as a control measure (Control Measure 97CMB-09) in the 1997 AQMP, as amended in 1999. Compliance with Rule 1105.1 is expected to significantly contribute to the overall improvement of air quality in the region. Therefore, the Ultramar Refinery Rule 1105.1 Compliance Project is within the scope of the larger project evaluated in the 2003 EA for Rule 1105.1. The proposed project will assist in the implementation of the SCAQMD's AQMP, and will assist the Basin in moving towards attainment of the state and national ambient air quality standards for PM<sub>10</sub>.

In evaluating whether the Ultramar Refinery project is individually significant, the SCAQMD did not take any emission reduction credit for emission reductions resulting from installation of the new ESP. However, in evaluating cumulative significance, there will be a substantial decrease in PM10 emissions from all refineries' FCCUs. Therefore, the Ultramar Refinery Rule 1105.1 Compliance Project will provide an overall air quality and, thus, public health benefit, consistent with the AQMP.

**18. c)** As discussed in Appendix C, on Page 2-28 of the 2003 Final EA, the proposed project may result in emissions of regulated air pollutants and may also increase the hazards at each affected refinery. Further analysis in the 2003 Final EA concluded that Rule 1105.1 would not generate significant adverse hazard and hazardous materials impacts. The analysis of the Ultramar Refinery Rule 1105.1 Compliance Project in this Negative Declaration concluded that hazards and hazardous materials impacts would not be significant and are considered to be within the scope of the Rule 1105.1 analysis in the 2003 Final EA. Further, air quality impacts for the Ultramar Refinery Rule 1105.1 Compliance Project were analyzed in this Negative Declaration. Construction air quality impacts were concluded to be within the scope of the construction analysis in the 2003 Final EA and do not exceed construction air quality impacts that were already presented in that document. Further, the air quality impacts associated with the construction of the Ultramar Refinery Rule 1105.1 Compliance Project do not exceed the applicable significance threshold and are not considered to be cumulatively considerable.

Operational air quality impacts from the proposed project are expected to be beneficial as there would be a reduction in PM10 emissions from the FCCU at the Ultramar Refinery and a reduction in mobile source emissions from the transport of PM10 wastes.

## **18.2 Conclusion**

In 2003, the SCAQMD prepared a Final EA to evaluate the impacts of adopting Rule 1105.1 to reduce emissions of PM10 and ammonia from refinery FCCUs. The analysis in the 2003 Final EA concluded that implementation of Rule 1105.1 would result in potentially significant adverse impacts associated with air quality during construction activities, but that the project impacts on other environmental resources were less than significant.

After the certification of the 2003 Final EA, Ultramar proceeded with detailed engineering design to develop a compliance plan for Rule 1105.1. To evaluate the project-specific impacts resulting from the proposed project, this Negative Declaration was prepared under CEQA Guidelines §15189 because the Ultramar Refinery's proposed project did not generate any new significant adverse environmental impacts or make substantially worse existing significant adverse environmental impacts that were already disclosed in the 2003 Final EA. Further, the air quality impacts associated with the construction of the Ultramar Refinery Rule 1105.1 Compliance Project do not exceed the applicable significance thresholds and are not considered to be cumulatively considerable. Based on the environmental analysis prepared for the currently proposed project, the SCAQMD has quantitatively and qualitatively demonstrated that the proposed project will not generate any new significant adverse impacts and meets the qualifications for the preparation of a Negative Declaration per the requirements of CEQA Guidelines §15070.

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## **CHAPTER 3**

### **ACRONYMS AND GLOSSARY**

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Acronyms and Abbreviations  
Glossary

**CHAPTER 3.0**

**ACRONYMS AND GLOSSARY**

<b>ABBREVIATION</b>	<b>DESCRIPTION</b>
AB2588	Air Toxic "Hot Spots" Information and Assessment Act
AB2595	California Clean Air Act
API	American Petroleum Institute
ADT	Average Daily Traffic
AEL	Acute Exposure Limit
AHM	Acutely Hazardous Material
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARB	Air Resources Board
ATIR	Air Toxics Inventory Report
AVR	Average Vehicle Ridership
BACT	Best Available Control Technology
Basin	South Coast Air Basin
bpd	barrels per day
BTU	British Thermal Units
BTU/hr	British Thermal Units per hour
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CalARP	California Accidental Release Prevention Program
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CalOSHA	California Occupational Safety and Health Administration
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEMS	Continuous Emissions Monitoring System
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CMP	Congestion Management Plan
CNEL	community noise equivalent level
CNS	Central nervous system
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
COMS	Continuous Operations Monitoring System
CPUC	California Public Utilities Commission
dBA	A-weighted noise level measurement in decibels
DOT	Department of Transportation

DTSC	California Environmental Protection Agency, Department of Toxic Substances Control
EIR	Environmental Impact Report
ERPG	Emergency Response Planning Guideline
°F	Degrees Fahrenheit
FCCU	Fluid Catalytic Cracking Unit
FEMA	Federal Emergency Management Agency
G	acceleration of gravity
gpm	gallons per minute
H <sub>2</sub>	Hydrogen
HAZOP	hazards and operation process
HMBP	Hazardous Materials Business Plan
HRA	Health Risk Assessment
ICU	Intersection Capacity Utilization
ID #	Identification number
ISCST3	Industrial Source Complex Model Short Term Version 3
°K	degrees Kelvin
LACFD	Los Angeles County Fire Department
LACSD	Los Angeles County Sanitation Districts
LACDPW	Los Angeles Department of Public Works
LADWP	Los Angeles Department of Water and Power
LAER	lowest achievable emission reduction
LEL	lower explosive limit
lbs	pounds
lbs/hr	pounds per hour
L <sub>dn</sub>	day-night average sound level
L <sub>eq</sub>	energy equivalent sound level
L <sub>max</sub>	Maximum sound level
L <sub>min</sub>	Minimum sound level
LOS	Level of Service
LPG	liquefied petroleum gas
L <sub>pk</sub>	Peak sound level
M-2	zone code associated with Heavy Manufacturing
MACT	Maximum Achieved Control Technologies
m/s	meters per second
MATES	Multiple Air Toxic Exposure Study
MEIR	maximum exposed individual resident
MEIW	maximum exposed individual worker
mmBtu/hr	million British thermal units per hour
m/s	meters per second
mw	megawatts
N <sub>2</sub>	nitrogen
NAAQS	National Ambient Air Quality Standards
nanograms/m <sup>3</sup>	nanograms per cubic meter
NESHAPS	National Emission Standards for Hazardous Air Pollutants

NFPA	National Fire Protection Agency
NIOSH	National Institute of Occupational Safety and Health
NOP	Notice of Preparation
NO <sub>x</sub>	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NS	No significant impacts
NSPS	New Source Performance Standards
NSR	New Source Review
OSHA	Occupational Safety and Health Administration
PAH's	Polynuclear Aromatic Hydrocarbons
pH	potential hydrogen ion concentration
PM <sub>10</sub>	particulate matter less than 10 microns equivalent aerodynamic diameter
PM <sub>2.5</sub>	particulate matter less than 10 microns equivalent aerodynamic diameter
ppbv	parts per billion by volume
ppm	parts per million
ppmv	parts per million by volume
PRD	pressure relief devices
PRC	Public Resources Code
PSD	Prevention of Significant Deterioration
psi	pounds per square inch
psia	pounds per square inch absolute
psig	pounds per square inch (gauge)
PSM	Process Safety Management Program
RCRA	Resource Conservation and Recovery Act
RECLAIM	Regional Clean Air Incentives Market
REL	Reference exposure level
ReVAP	Reduced Volatility Alkylation Process
RFG	reformulated fuels gasoline
RMP	Risk Management Program
RMPP	Risk Management and Prevention Program
RVP	Reid Vapor Pressure
RWQCB	Regional Water Quality Control Board, Los Angeles Region
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison Company
SCR	Selective Catalytic Reduction
SCS	Soil Conservation Service
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	sulfur oxide
SPCC	Spill Prevention, Control and Countermeasure
SRU	Sulfur Recovery Unit
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board

T-BACT	Toxics Best Available Control Technology
TACs	toxic air contaminants
TDM	transportation demand management
TDS	total dissolved solids
TPH	total petroleum hydrocarbons
USDOT	United States Department of Transportation
U.S. EPA	United States Environmental Protection Agency
USC	United States Code
USDA	United States Department of Agriculture
ug/l	micrograms per liter
ug/m <sup>3</sup>	micrograms per cubic meter
UVCE	Unconfined Vapor Cloud Explosion
V/C	volume to capacity ratio
VOC	volatile organic compounds
volatiles	purgeable organics
WRD	Water Replenishment District

## GLOSSARY

TERM	DEFINITION
Alkylation	The reaction of low-molecular-weight olefins with an isoparaffin to produce a saturated compound of high octane number.
Alkylate	The product of an alkylation process.
Anhydrous	Free from water.
Aqueous	Formed from water, having a water base.
Aromatics	Hydrocarbons which contain one or more benzene rings.
Barrel	42 gallons.
Blending	One of the final operations in refining, in which two or more different components are mixed together to obtain the desired range of properties in the finished product.
Catalyst	A substance that promotes a chemical reaction to take place but which is not itself chemically changed.
Cracking	The process of breaking down higher molecular weight hydrocarbons to components with smaller molecular weights by the application of heat; cracking in the presence of a suitable catalyst produces an improvement in product yield and quality over simple thermal cracking.
Distillation	The process of heating a liquid to its boiling point and condensing and collecting the vapor.
Flares	Emergency equipment used to incinerate refinery gases during upset, startup, or shutdown conditions.
Heat exchanger	Process equipment used to transfer heat from one medium to another.
Heater	Process equipment used to raise the temperature of refinery streams processing.

Hydrocarbon	Organic compound containing hydrogen and carbon, commonly occurring in petroleum, natural gas, and coal.												
Hydrotreater	A machine that treats hydrocarbons.												
Hydrotreating	A process to catalytically stabilize petroleum products of feedstocks by reacting them with hydrogen.												
Isomerization	The rearrangement of straight-chain hydrocarbon molecules to form branch chain products; normal butane may be isomerized to provide a portion of the isobutane feed needed for the alkylation process.												
Liquefied Petroleum Gas (LPG)	Liquefied light end gases often used for home heating and cooking; this gas is usually 95 percent propane, the remainder being split between ethane and butane.												
Naphtha	<p>A crude distillation unit cut in the range of C<sub>7</sub>-420°; naphthas are subdivided – according to the actual crude distillation cuts - into light, intermediate, heavy, and very heavy virgin naphthas; a typical crude distillation operation would be:</p> <table><tr><td>C<sub>7</sub>-160°</td><td>-</td><td>light naphtha</td></tr><tr><td>160-280°</td><td>-</td><td>intermediate naphtha</td></tr><tr><td>280-330°</td><td>-</td><td>heavy naphtha</td></tr><tr><td>330-420°</td><td>-</td><td>very heavy naphtha</td></tr></table>	C <sub>7</sub> -160°	-	light naphtha	160-280°	-	intermediate naphtha	280-330°	-	heavy naphtha	330-420°	-	very heavy naphtha
C <sub>7</sub> -160°	-	light naphtha											
160-280°	-	intermediate naphtha											
280-330°	-	heavy naphtha											
330-420°	-	very heavy naphtha											
Octane	Measurement of the burning quality of the gasoline; reflects the Suitability of gasoline to perform in internal combustion engines smoothly without letting the engine knock or ping.												
Olefins	Hydrocarbons that contain at least two carbons joined by double bonds; olefins do not naturally occur in crude oils but are formed during the processing.												
Palentological	Prehistoric life.												
Peak Hour	This typically refers to the hour during the AM peak period (typically 7 AM to 9 AM) or the PM peak period (typically 4 PM to 6 PM) in which the greatest number of vehicles trips are generated by a given land use or are traveling on a given roadway.												
Reactor	Vessels in which desired reactions take place.												
Refinery gas	Gas produced from refinery operations used primarily for												



(fuel gas)	combustion in refinery heaters and boilers.
Reformate	One of the products from a reformer; a reformed naphtha; the naphtha is then upgraded in octane by means of catalytic or thermal reforming process.
Reformulated gasoline	New gasoline required under the federal Clean Air Act and California Air Resources Board to reduce emissions.
Reid Vapor Pressure	The vapor pressure of a product determined in a volume of air four times greater than the liquid volume at 100°F; Reid vapor pressure (RVP) is an indication of the vapor-lock tendency of a motor gasoline, as well as explosion and evaporation hazards.
Seiches	A vibration of the surface of a lake or landlocked sea that varies in period from a few minutes to several hours and which many change in intensity.
Stripper or Splitter	Refinery equipment used to separate two components in a feed stream; examples include sour water strippers and naphtha splitters.